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UNIVERSITY OF ALBERTA

SHIFTING FOCUS: COMBINING WORK AND FAMILY AMONG ACADEMICS WHO ARE PARENTS

BY

CATHARINE ELIZABETH CLEMENT

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE

DEPARTMENT OF FAMILY STUDIES

EDMONTON, ALBERTA

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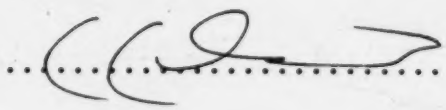

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE
IN FAMILY STUDIES.

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ABSTRACT

The issue of the proportionately small numbers of women at higher ranks in academe has been a focus for much discussion and research in recent years. One issue which has not been closely examined in this literature is the impact that attempting to combine job and family roles has on academics' ability to adequately meet these role demands. Because women still bear the primary responsibility for domestic tasks, it has been suggested that this interferes with their ability to meet the criteria for academic advancement and therefore contributes to their lack of representation at higher ranks.

The research undertaken here explored this issue in the context of role theory. The amount of work that academics perform at home and at their jobs, was examined in relation to their feelings about this workload and their perceptions that time pressures interfere with their abilities to meet role expectations.

Data from a survey of academic staff was used for secondary analysis in this study. Fifty females and 25 males, who were married or cohabiting and who had children living with them, were selected from the original respondents. Indices were used to measure all of the major variables. The primary outcome variable, role overload, was

measured using an modified version of the Bohen & Viveros-Long (1981) Job-Family Role Strain Index. Chi-Square and t-tests were used to test for gender differences. A set of multiple regression equations was used to explore the relationships between a set of selected personal and family variables, domestic and job workload, satisfaction with workload, and role overload.

Women reported heavier a domestic workload and were satisfied with their workload in fewer of their domestic tasks. Men reported heavier research and graduate teaching loads, but there were no gender differences in overall job workload. Neither were there any gender differences in the number of job tasks with which respondents were satisfied, or in levels of role overload.

The results of the multiple regressions suggested that gender is related to domestic workload; age of respondent is related to relative job workload; and age of youngest child, relative job workload, and satisfaction with job workload are related to role overload.

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CHAPTER I

STATEMENT OF THE PROBLEM

An issue of increasing concern in the academic community is the proportionately small numbers of women at higher levels of academic rank. In Canada in 1985-86 women comprised 29% of assistant professors, 16% of associate professors, and 6% of full professors. Across all major fields of study, the proportion of women declined as academic rank increased (Statistics Canada, 1987). This pattern is also found among faculty at the University of Alberta. Females make up 36% of assistant professors, 22% of associate professors, and 9% of full professors at the University of Alberta (Equity Office, 1990).

Explanations for this phenomenon include a lack of career commitment among female students and academics; discriminatory hiring and promotion practices on the part of universities; and a shortage of qualified female Ph.D's from which to select (Astin, 1973; DeSole & Hoffman, 1981; Menges & Exum, 1983; Post, 1981; Theodore, 1986). One set of issues which underlies all of these arguments is the problems that female academics

experience in attempting to mesh their family obligations with the demands of an academic career.

The literature examining the experiences of women in academe suggests that having the major responsibility for raising children puts women at a professional disadvantage (Aisenberg & Harrington, 1988). The standard career path and heavy time commitment that are the keys to success in academe are based on the assumption that occupational responsibilities can be pursued with minimal interruption from family obligations (Aisenberg & Harrington, 1988; Simeone, 1987). Thus, success in academe may carry a heavy price for women who have to divide their time between two roles that both demand a heavy commitment of time and energy. Likewise, men who are directly and actively involved in childrearing may face similar time pressures.

Academics who are parents may perceive that they lack sufficient time to adequately fulfill job and family responsibilities. This perception may put limits on the degree to which these academics are available to take on the tasks that will lead to academic success. These time pressures may also contribute to higher overall stress levels.

Family Roles

Research dealing with multiple roles has examined the relationship between the number of roles that people occupy and their psychological health. One aspect of this relationship that previous research has failed to consider adequately is possible gender differences in the workload, and the concomitant potential for role strain which is associated with the occupation of specific roles. For example, patterns of family roles indicate a gender imbalance in the performance of, and responsibility for, tasks. Women continue to perform and bear prime responsibility for most household and child rearing tasks (Barnett & Baruch, 1987; Berardo, Shehan, & Leslie, 1987; Berheide, Berk, & Berk, 1976; Berk, 1985; Berk & Berk, 1979; Coverman & Sheley, 1986; Lein, 1984; Maret & Finlay, 1984; Pleck, 1983; Robinson, 1977; Yogev, 1981). Thus, the number of domestic responsibilities associated with being a parent may be quite different for mothers and fathers.

Work Roles

Similarly, there appears to be systematic variation in the job related workload that academic women and men perform. Studies of gender differences in the kinds of tasks that academics perform have suggested that, when other factors are controlled, female faculty are more

likely to have heavier undergraduate teaching loads (Gmelch, Wilke, and Lovrich, 1986). In addition, Gmelch et al. (1986) also report several studies which indicate that married women tend to be at lower academic rank. They also have more committee responsibilities, less research support, and less time in graduate teaching than either their male counterparts or their single female counterparts.

Time Pressures

Time pressures have been reported as a major source of job dissatisfaction among academics in a study by the Carnegie Foundation (1986). A shortage of time has also been related to stress levels among academics. Gender differences have also emerged in this research. Women reported significantly higher stress levels and greater time constraints than either married or single men (Gmelch et al, 1986). It is therefore important to measure the workloads and time pressures that are associated with domestic as well as work roles for both men and women.

Role Strain

In the literature examining the psychological outcomes of occupying multiple roles, quantitative and qualitative aspects have been considered. While the bulk

of the research has focussed on the psychological impact of the number of roles occupied, the impact of the quality of experiences in these roles has also been considered. The findings of Barnett and Baruch (1986), Parry and Ware (1980), and Radloff (1975) support the argument that positive feelings about roles may reduce stress levels.

The Problem

The research undertaken here seeks to examine the relationship between the amount of work that academics perceive they perform, how they feel about this workload, and the degree to which they experience role overload. It will also explore possible gender differences in perceived workload, satisfaction with workload, and perceived time pressures. This problem will be examined among female and male academic staff who have children in an effort to increase our understanding of the problems that confront people who attempt to combine parenting with a demanding career. It will also help to clarify the similarities and differences that exist between the experiences of women and men.

Definitions of Variables

The major concepts that are examined in this study will be defined here. These concepts include: domestic

workload, relative job workload, domestic workload satisfaction, job workload satisfaction, and role overload.

Domestic Workload

Domestic workload is defined as the level of responsibility that individuals perceive they have for tasks within the home.

Relative Job Workload

Relative job workload is defined as individuals' perceptions of their own workload relative to that of colleagues of similar rank.

Domestic Workload Satisfaction

Domestic workload satisfaction is defined as individuals' affective responses to their perceived domestic workload.

Job Workload Satisfaction

Job workload satisfaction is defined as individuals' affective responses to their perceived relative job workload.

Role Overload

The concept of role overload was used here to examine time pressures. This concept has been defined in many ways in the literature. The definition used here combines the definitions of Hawkins and Rovine (1988) and Sieber (1974). Role overload is defined as the frequency with which individuals experience a lack of time to adequately fulfill their role expectations.

The relationships between these variables will be explored among a population of academic staff. For the purposes of this analysis "academic staff" is defined as those employees who are eligible for membership in the Association of Academic Staff at the University of Alberta. This group of employees includes faculty, faculty service officers (FSO), administrative professional officers (APO), and librarians.

Research Questions

The research questions guiding this study are:

1) i) What are the profiles of the following workload variables among a selected group of university academic staff who have children living with them:

a) Domestic workload?

b) Relative job workload?

c) Domestic workload satisfaction?

d) Job workload satisfaction?

e) Role overload?

ii) Are there gender differences in the profiles for these same variables?

2) What are the relationships among selected personal and family variables, perceived domestic and job workload, satisfaction with perceived domestic and job workload, and role overload?

i) How are age and number of children, and age and gender of respondent related to perceived:

a) Domestic workload?

b) Relative job workload?

ii) How are age and number of children, age and gender of respondent, domestic workload, and relative job workload related to:

a) Domestic workload satisfaction?

b) Job workload satisfaction?

iii) How are age and number of children, age and gender of respondent, domestic workload, relative job workload, and domestic and job workload satisfaction related to role overload?

3) Does workload satisfaction mediate the relationship between workload and role overload?

i) Does domestic workload satisfaction mediate the relationship between domestic workload and role overload?

ii) Does job workload satisfaction mediate the relationship between relative job workload and role overload?

CHAPTER II

LITERATURE REVIEW

In this chapter the literature exploring areas of the research that are relevant to the problem will be reviewed. It will include consideration of the research findings with respect to the division of household labour and the job workload of academics. The theoretical issues and empirical findings surrounding the construct of role overload will be examined. Finally, the literature relevant to domestic and job workload satisfaction and their relationships to role overload will be explored.

Participation Rates in Domestic Labour

The manner in which household tasks are shared between husband and wife has been examined extensively in the literature. In particular, the levels of wives' and husbands' participation in various household and child-rearing tasks have been the focus of time use studies. This research points to a very limited increase in husbands' participation in household tasks as wives' work force participation has increased (Berardo, Shehan, & Leslie, 1987; Coverman & Sheley, 1986; Oakley, 1974;

Robinson, 1977). Employed women continue to spend more time at household and child care tasks than do their husbands (Barnett & Baruch, 1987; Berardo, Shehan, & Leslie, 1987; Berheide, Berk, & Berk, 1976; Berk, 1985; Berk & Berk, 1979; Coverman & Sheley, 1986; Lein, 1984; Maret & Finlay, 1984; Pleck, 1983; Robinson, 1977; Spitze, 1988; Yogev, 1981).

Though the increase in husbands' participation rates is relatively small, Bird, Bird and Scruggs (1984) report that men are more active parents than in the past, and Pleck (1985) attributes an increase in male participation in housework to an increase in child care. However, fathers' participation rates in housework and in child care are not strongly correlated (Nyquist, Slivken, Spence, & Helmreich, 1985; Oakley, 1974). Thus the (limited) increases in fathers' participation in child care are not necessarily associated with their increased participation in other domestic tasks.

Gender differences in domestic task participation rates, as measured by time spent in certain tasks, have received a great deal of attention in the literature. However, the manner in which responsibility for seeing that these tasks get done has received less attention in the research. Barnett and Baruch (1987) reported that 113/160 fathers bore no responsibility for child care

tasks, and 150/160 fathers bore no responsibility for "feminine" home chores in their sample of single and dual earner couples. Gender stereotyping was also evident in the types of tasks that wives in Berk's (1985) study identified as being the responsibility of their husbands. These women reported that their husbands took responsibility for tasks such as household repairs, taking out the garbage, yard work and mowing the lawn. However, Maret and Finlay (1984) reported that a majority of women in dual earner families are involved in sharing of responsibility for child care and certain household tasks.

A possible explanation for this discrepancy might be that responsibility was operationalized differently in the two studies. Berk (1985) and Barnett and Baruch (1987) asked which tasks fathers had responsibility for. Maret and Finlay's measure, however, asked mothers if they shared responsibility but did not ask with whom they shared it (Maret & Finlay, 1984). It is possible that these tasks were shared with family members other than fathers.

Family structure variables have been included among the factors that have been examined as possible influences on the participation rates of fathers. The studies that have examined the influence of children on

the division of labour have considered both the ages of children and the number of children.

Age of Children

A decline in the amount of time that fathers spend in child care as children get older has been reported in many studies. Age of children was reported to be negatively related to father's participation in child care in Barnett and Baruch's study (1987). The relationship held for both total interaction time and solo interaction time. Pleck (1983) reported the same relationship between the age of youngest child and father's participation in child care. As the youngest child got older, the father's participation rate decreased. Coverman and Sheley (1986) compared two large data sets, from 1965-66 and 1975-76. They reported that, in 1975, age of children was negatively related to fathers' participation in child care. However, Coverman and Sheley (1986) also reported that, compared with fathers in 1965, overall child care participation rates for fathers of young children had increased in the more recent data set. Robinson (1977) reported that, while the age of children was negatively related to the time both parents spend in child care and that the presence of older children reduced the time spent in child care, these relationships were stronger for mothers than for

fathers. Because women spent more time in child care, the impact of older children on their workload was more noticeable

With regard to the impact of age of children on the housework contributions of fathers, Coverman and Sheley (1986) found that in the 1975 sample, fathers of older children spent more time in housework than they did in 1965. Conversely, fathers of younger children spent less time in housework than they did in 1965. Similarly, Pleck (1983) reported that fathers' housework increased, slightly, as the youngest child gets older.

Though these studies suggest that fathers' participation in housework increases as children get older, other studies have reported either no relationship between the two variables (Berheide, Berk, & Berk, 1976; Berk, 1985; Robinson, 1977), or a negative relationship between the two (Berardo, Shehan, & Leslie, 1987).

Lack of consensus regarding the influence of children's' age on the participation rates of fathers in housework may be due to the fact that these rates are still too low overall to be reliably associated with any factors. In none of the above studies was fathers' time in either child care or housework anywhere near equal to that of mothers. It is also possible that recent changes

in attitudes regarding fathers' participation in domestic tasks are not (yet) well enough established to have a consistent impact on men's behavior.

Number of Children

The research examining the impact of number of children on fathers' participation in both housework and child care is more consistent. The number of children in the household has been related to fathers' participation in both sets of tasks. Barnett and Baruch (1987), Coverman and Sheley (1986), and Robinson (1977), all report that number of children is positively correlated with fathers' participation in child care. Though Robinson (1977) reports a similar relationship, this relationship is stronger for women than for men.

Thus, women remain the primary care-givers of young children. Research examining the impact of the age of children on the time that mothers spend in child care reveals that this time decreases as children get older (Pleck, 1983; Robinson, 1977). With regards to time spent in housework, research indicates that the presence (Berardo, Shehan, & Leslie, 1987; Yogev, 1981) and number of young children (Robinson, 1977) are positively associated with mothers' time in housework.

Responsibility for Domestic Tasks

While a great deal of research has examined factors associated with participation in domestic tasks, little research has examined the factors that are associated with responsibility for these tasks. Barnett and Baruch (1987) dropped the "responsibility" variables from their analysis of factors influencing fathers' participation rates because the men's levels of responsibility were too low. Maret and Finlay (1984) reported that demographic, but not attitudinal, variables were related to wives having sole responsibility for child care and housekeeping tasks.

Maret and Finlay (1984) reported that, when other factors were controlled, husband's income was positively related to wife's home responsibilities. However wife's income was negatively related to her level of responsibility for domestic tasks. Thus, as a wife's income increases as a proportion of her husband's income, her responsibility level declines. Other variables such as age, education, and attitudes towards women's roles were not found to be significantly related to levels of women's responsibility for domestic tasks (Maret & Finlay, 1984).

These findings are consistent with the relatively low participation rates that are reported by fathers in child-related and "feminine" household tasks. The responsibility rates suggest that, while fathers may "help out" now and then with these tasks, it is mothers who retain the responsibility for seeing that they are done and, indeed, mothers perform much of the work.

Job Workload

Job-related workload is a major contributor to the time demands faced by academic staff who are parents. Overall, the specific tasks performed by faculty are similar, regardless of rank (Simeone, 1987). Simeone (1987) categorized the work of faculty into three areas: research, teaching, and community service. The workload of other members of the academic staff, including administrative professional officers, faculty service officers, and librarians, consists of tasks different from those of faculty. For example, APO's do not normally have teaching or research responsibilities (University of Alberta, 1983a, 1983b, 1983c, 1988).

Though faculty generally perform similar types of tasks, the evidence points to proportionate differences in the way these tasks are distributed between female and male faculty. The research of Simeone (1987) and Gmelch

et al. (1986) suggests that overall, women are more likely to teach than to do research, while the opposite is true for men. However, Astin and Snyder's (1982) data indicate that this difference may be lessening. Simeone (1987) and Gmelch et al. (1986) have reported that women are more likely than men to teach undergraduate courses as opposed to graduate courses.

Role Overload

The research exploring the psychological outcomes of occupying multiple roles is relevant to the problems confronted by academics who are parents. Early research examining the impact of multiple roles on the psychological health of mothers yielded conflicting results. Many studies have shown that employment was associated with improved psychological health (Baruch & Barnett, 1986; Gove & Geerken, 1977; Lovell-Troy, 1983; Northcott, 1981; Pietromonaco, Manis & Frohardt-Lane, 1986; Welch & Booth, 1977). However, other studies have concluded that non-employed mothers enjoy better mental health (Feree, 1984; Kandel, Davies, & Raveis, 1985). Still other research suggests that there is no difference between the two groups (Aneshensel, Frerichs, & Clark, 1981; Gore & Mangione, 1983; Shehan, 1984; Wright, 1978). In her review of this literature, Thoits (1987) concluded that, at the very least, involvement in multiple roles is

not harmful to many aspects of women's psychological health.

The concept "role strain" was used by Goode (1960) to refer to a particular negative outcome of occupying multiple roles. Goode (1960) defined role strain as "felt difficulty meeting role demands". However, critics of Goode's conceptualization have argued that role strain is not a unitary concept. Sieber (1974) and Haw (1982) have pointed out that it is important to distinguish between different aspects of the experience of role strain. Sieber (1974) has suggested that these two aspects are role overload and role conflict. He argued that role overload emerges from "constraints imposed by time" and that role conflict results from "discrepant expectations irrespective of time" that arise from different role obligations.

Sieber (1974) and Marks (1977) have also challenged Goode's assumption that occupancy of multiple roles necessarily has negative outcomes. Marks (1977) suggested that Goode's construct of role strain is based on a "scarcity hypothesis" which assumes that people have finite time and energy resources. He argued that these resources are flexible and that commitment to a role is an important determinant of the time and energy that individuals "find" to fulfill a given set of role

obligations. Thus role overload and role conflict are not the only possible outcomes of involvement in multiple roles.

Sieber (1974) has argued that multiple roles may offer individuals the opportunity to accumulate role privileges such as overall status and security, resources for status enhancement and role performance, and ego gratification. This argument is supported by the research findings of Baruch and Barnett (1986), Gove and Geerken (1977), Lovell-Troy (1983), Northcott (1981), Pietromonaco, Manis, and Frohardt-Lane (1986), Thoits (1983), and Welch and Booth (1977), which have found correlations between women's employment and higher levels of psychological health.

In her 1982 review of the literature examining the relationship between women's employment and stress, Haw pointed to some methodological problems with the measures of role strain that have been used in the research. She pointed out that the research has not made use of direct measures of perceptions of stress. She argues that measures of individuals' cognitive appraisals of situations are needed and are important for understanding "physiological, affective and behavioral responses" (Haw, 1982, p.141).

The research findings of Barnett and Baruch (1985) have also suggested that role overload and role conflict are not necessarily correlated with negative psychological outcomes. These findings suggest that situational variables may influence this relationship. The authors reported a strong and significant correlation between role strain (role overload and role conflict) and anxiety among women who were not employed, but not among women who were employed. These findings contradict Goode's hypothesis which predicts that anxiety levels should be higher among the latter group.

Another problem that has been identified in this research is the tendency to focus on the quantitative aspects of role occupancy, while ignoring the qualitative aspects. This research has tended to focus on the effects of the number of roles occupied, but few studies have considered the effects of quality of experience in these roles. Barnett and Baruch (1985) and Baruch and Barnett (1986) have suggested that this omission is a factor contributing to some of the contradictory findings with regards to the outcomes of women's employment. Their own research, and that of Parry and Warr (1980), and Radloff (1975), has suggested that quality of experience in a role may be an important mediator between the number of roles (or positions) occupied and

psychological outcomes (Barnett & Baruch, 1985; Baruch & Barnett, 1986).

Thus the literature indicates a need to develop separate measures of role overload and role conflict that are based on the respondent's perceptions. It also appears that there is a need to examine the relationship between these perceptual measures of role conflict and overload and the nature and quality of experience in roles.

Satisfaction with Division of Domestic Labour

One means of conceptualizing quality of experience in roles is to examine satisfaction levels. When considering the impact of job and family workload on role overload it is necessary to consider satisfaction with both sources of workload.

In addition to examining how couples divide their household tasks, research has also explored how spouses feel about this division of domestic labour. Lewis and Cooper (1987) reported higher levels of dissatisfaction with partners' contribution to child care and domestic labour among women than among men. However, Berheide et al. (1976) found that women expressed little dissatisfaction with household labour in spite of the fact that they did the lion's share of it. In a similar

vein, Yogev (1981) also reported that most women felt their husbands were doing "their share" of the house work and child care, even though there was a gender disparity in the division of tasks. Likewise, Benin and Agostinelli (1988), Berk (1985), Pleck (1985), and Robinson (1977) reported that women's satisfaction with the division of domestic labour was not correlated with the amount of time they spent at it.

While these finding are relatively consistent, the research examining gender differences in preferred patterns of sharing household and child rearing tasks is contradictory. The research supports both theoretical positions that have been put forward to explain the basis on which individuals judge that they are satisfied with their contribution to domestic labour. These positions propose that satisfaction with the division of labour in the home is assessed on the basis of 1) an equitable division of labour, such that both individuals are most satisfied when they feel they are doing their "share"; or 2) an exchange model which suggests that individuals are happiest when they can maximize their "rewards" by doing less than their share while others do more.

With regard to wives' satisfaction with the domestic division of labour, the findings of Benin and Agostinelli (1988) support the exchange model. For wives in dual

earner families satisfaction with the division of labour increased as the proportion of tasks performed by husband increased. Conversely, however, in a study of 106 faculty women, Yogev (1981) reported that they did not expect or want an egalitarian pattern of housework and child care. The majority of these women considered their husbands' low participation rates "fair". Berheide et al. (1976) also reported that women expressed little dissatisfaction with their domestic workload labour in spite of a gender disparity in the division of this work.

Thus, it is not clear that women want an equal division of labour in the home. Pleck's (1985) data suggests that, while the number of women who wanted their husbands to participate more in domestic tasks increased slightly between 1966 and 1975, these women remain a minority (30%), albeit a large minority. Lein (1984) suggests that women may try to compensate for guilt they feel for the time and energy they expend at work, by working harder at home. This is consistent with Yogev's (1982) findings that mothers who put in longer hours of work, both at home and on the job, reported less overload than their childless colleagues. The fact that attitudinal variables have not been found to be consistently related to the domestic division of labour (Hardesty & Bokemaier, 1989; Maret & Finlay, 1984) also suggests that at the very least women are in a transition

period. Traditional values may still play an important role in shaping the expectations that women perceive are associated with the positions of wife-mother and employee.

The relative proportion of domestic tasks performed by each spouse has also been examined in relation to husband's satisfaction. The highest satisfaction levels among husbands were correlated with an equal (50/50) sharing of tasks in Benin and Agostinelli's (1988) study of dual earner couples. These findings support the equity model. Yogev and Brett (1985), however, reported higher levels of marital satisfaction among husbands who believed their spouses did more than their share of child care and housework, and those who believed that they themselves did their share of housework. The latter findings suggest that the basis for husbands' satisfaction varies depending on whose workload is being considered.

The apparent contradictions in the findings regarding husbands' satisfaction levels might be explained by the different methods of estimating the amount of work that each spouse does. The Benin and Agostinelli 1988) study asked for an estimate of the proportion of tasks each spouse performs. The Yogev and Brett (1985) study asked if the division of tasks is

"fair" but they did not ask what the actual division of labour was.

While the amount of time that women spend in domestic labour and the proportion of tasks for which they have responsibility do not appear to be related to satisfaction, research suggests that the type of tasks in which husbands participate is correlated with wives' satisfaction with domestic division of labour. The findings of Benin and Agostinelli (1988) and those of Ross, Mirowsky and Huber (1983) suggest that husband's participation in typically "female" tasks, apart from child care, have a positive influence on wife's level of satisfaction with the division of labour in the home.

Job Workload Satisfaction Among Academics

Theories of role strain suggest that satisfaction with job workload is another important factor to consider when exploring how job and family responsibilities are combined. Satisfaction with job workload per se has received a limited amount of attention in the literature examining the workplace experiences of academics. Ferber and Loeb (1973) reported that heavier workload was included among female academics' complaints of sex discrimination. Heavy workload has also emerged as a factor contributing to the negative experiences of female

academics (Sandler, 1986). In anecdotal accounts, dissatisfied female faculty members reported that they bear proportionately more committee and teaching responsibilities than their male colleagues of similar rank and experience (Yoder, 1985; Sandler, 1986).

Workload has been included as an explanatory variable in the research examining overall job satisfaction among academics. Workload appears to be one of several sources of dissatisfaction among faculty. In a national (U.S) sample, the Carnegie Foundation (1986) reported that displeasure with course load was expressed by fairly high percentages of both most and least satisfied faculty. Seventy-two per cent of faculty who were least satisfied identified "teaching load" at their institution as "fair to poor", compared to 51 per cent of those who were most satisfied.

Workload was the third most common negative aspect of their job that was identified by faculty in a Canadian study (Timmons, 1989). However, administrative problems, lack of support, and lack of grants and funds were more frequently identified as negative features of the job. Low salaries, working conditions and facilities, and lack of recognition have also been identified in the literature as other sources of dissatisfaction among faculty (reported in Timmons, 1989).

Though there is some evidence for differences in the workloads of male and female academics, there is little evidence that these differences are accompanied by corresponding differences in workload satisfaction levels. (Gmelch, et al., 1986; Simeone, 1987). In Timmons' (1989) gender comparison of the rankings of negative aspects of academic work, workload was the third most frequently occurring factor for both females and males. However, this is a measure of overall workload satisfaction and does not take into account satisfaction with the workload associated with different types of tasks.

Satisfaction and Role Overload

Domestic Workload Satisfaction and Role Overload

Few studies have examined directly the relationship between quality of experience in roles and role overload. Barnett and Baruch (1985) report that satisfaction with work and parental roles each contributed significantly to the variance in role overload among the women in their study. Similarly, Cooke and Rousseau (1984) reported a weak but significant positive correlation between work overload and job dissatisfaction in their study of teachers. However, the results of the latter study suggested that life satisfaction is not related to role overload. On the other hand, Wiley (1987) reported that

life satisfaction, but not job satisfaction, had a weak but significant negative relationship with role overload.

The difference in the findings of the latter two studies is difficult to explain since they both employed multiple measures of the main variables and both studies examined satisfaction as the outcome or dependent variable. One possible reason for this discrepancy might be a difference in the samples used in these two studies. While the sample employed by Cooke and Rousseau (1984) consisted of teachers employed full-time, Wiley's (1987) sample consisted of students attending evening classes who were also employed. The sample of teachers might have higher overall levels of job satisfaction than the student sample, for whom attending night classes might have been an indication of job dissatisfaction. Overall satisfaction levels are not reported in Wiley's (1987) study.

Data from Pleck's (1985) study lend support to the hypothesis that satisfaction mediates the relationship between workload and role overload. In his analysis of two national American data sets (1975-76 Study of Time Use, and 1977 Quality of Life Survey) he reported that wife's satisfaction with her husband's participation rate in domestic tasks moderated the relationship between wife's family time use and her level of adjustment.

Wife's time in child care was negatively correlated with adjustment only if she desired more participation from her husband. Otherwise, time in child care was positively correlated with adjustment levels.

Job Workload Satisfaction and Role Overload

Research examining the experiences of academics has not considered role overload as an outcome variable. In establishing that there is a relationship between the two variables, this research has, however, considered time pressures as an important source of job dissatisfaction for faculty members (Carnegie Foundation, 1986; Gmelch et al., 1986). Gmelch et al. (1986) report that time constraints ranked second only to "reward and recognition" in contributing to the stress levels of female and male faculty members. Time constraints accounted for 12% of the variance in stress levels. In a related study of the stressors in an academic career, three of the top ten stressors identified as "serious" relate to time constraints (Gmelch, Lovrich, & Wilke, 1984). These three stressors were: "Having insufficient time to keep abreast with current developments in my field"; "Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day"; and "Attending meetings which take up too much time" (Gmelch et al., 1984, p. 484).

In a study by the Carnegie Foundation, the effects of collegiate teaching on personal life and teaching load ranked #2 and #10 (respectively) as factors related to the job satisfaction of faculty from American universities (Carnegie Foundation, 1986). Closer examination of the items assessing the effects of teaching on personal life indicate that time constraints play a role here as well. Less satisfied respondents were more likely to report that they "hardly ever get the time to give a piece of work the attention it deserves" (Carnegie Foundation, 1986, p.34).

Timmons (1989) reported that "hours and time pressures" ranked fourth out of the six most common negative aspects of academic working conditions in a Canadian sample of male and female academics. When negative aspects were examined by gender grouping, "hours and time pressures" ranked among the five most frequent categories for women but not for men. Thus, while workload is among the factors that have been identified with overall job dissatisfaction among academics, it is not clear how level of workload is associated with dissatisfaction or whether there are gender differences in this relationship.

Summary

The literature examining the division of labour in the home suggests that domestic tasks are distributed along traditional lines. Though there is evidence of small increases in male participation in traditionally "female" tasks under certain circumstances, women continue to perform and bear responsibility for the majority of domestic tasks.

The levels of satisfaction with domestic workload reported by wives do not appear to be strongly correlated with the amount of time their husbands spend in domestic tasks. Wives' reported levels of satisfaction appear to be influenced more by the type of tasks that their husbands perform. Husbands' participation in housekeeping tasks seems to have a stronger, positive, impact on wives' satisfaction than does their participation in tasks related to children. It is less clear what division of domestic labour husbands are satisfied with. There is some evidence that husbands are willing to participate equally in domestic tasks, but there is also evidence that both women and men still see these tasks as responsibility of women.

Research comparing the workload of female and male academics suggests there may be gender differences in

level of workload in specific task areas. These studies suggest that women spend less time in research and are more likely to teach undergraduate courses. It is less clear, however, whether these differences are a result of personal preferences or gender discrepancies in access to opportunities.

Job workload appears to be among the major sources of stress and dissatisfaction among academics. In addition, time pressures originating from job tasks have also been considered as a source of stress for academics. However, the degree to which family responsibilities are also related to these stress levels has not been closely examined in the research on faculty stress levels. Neither has this literature taken into account possible gender differences in the impact that family responsibilities have on the stress levels of academics.

The model examined in this study attempts to place the research about workload and stress levels of academics who are parents in the context of the "role strain" literature. It examines the combined effects of personal and demographic variables, proposed to influence level of job and domestic workload, on workload, on satisfaction with workload, and on role overload. In this way the model explores the multiple factors which influence academics' perceptions that time pressures

interfere with their abilities to perform adequately in job and family roles. The model will be specified in detail in the next chapter.

CHAPTER III

CONCEPTUAL FRAMEWORK

This chapter will examine Role Theory as the basis on which the model used in this study has been developed. The major concepts, relationships, and assumptions of this theoretical framework will be examined. Finally, the concepts, relationships, and assumptions of the conceptual model will be discussed.

Role Theory

Role theory has been described as the study of "patterns of behavior that are characteristic of persons and contexts" (Biddle, 1979, p.20) and of the processes which explain or are affected by those behaviors (Biddle, 1979). Among the major concepts employed in role theory are "role" and "position".

Because these terms have been defined inconsistently and are often used interchangeably in the literature, Biddle (1979) argues that it is important to distinguish between the two. Hill and Hansen (1960) describe the family as "a unity of interacting persons, each occupying...position(s) within the family to which a

number of roles are assigned". These positions are wife-mother, husband-father, daughter-sister, and son-brother (Hill, 1970).

Burr, Leigh, Day and Constantine (1979) define roles as "more or less integrated sets of social norms (which) are distinguishable from other sets of norms that constitute other roles" (Burr et al., 1979). Central to the concepts of role and position is the idea that there are shared, social expectations or norms associated with the enactment of both roles and of positions (Biddle, 1979; Burr et al., 1979). These expectations are situationally and culturally defined. In a given situation and cultural setting, an individual who occupies a particular position is expected to perform in a manner congruent with the set of roles characteristic of that position.

If the cultural setting is understood, observed behaviors can serve as a guide to determining the roles and positions that people occupy. However, role expectations change over time, and people vary in their ability or desire to meet these expectations. For example, social historians have traced changes in the role expectations and behaviors of middle-class, married women in America and Europe in the seventeenth and eighteenth centuries with the advent of the industrial

revolution and in the years since then (Harris, 1978; Matthaei, 1982). The historical record makes it clear that only certain segments of the population have ever been in a position to meet these role expectations. Throughout history low income women have faced the challenge of helping to support, or indeed being the sole support for, their families while meeting household standards that only those with time and money could meet (Tilly & Scott, 1978). As more women from all income levels enter the workforce (Matthaei, 1982), particularly women with young children (Statistics Canada, 1985) an increasingly larger proportion of women are vulnerable to these pressures.

With the rejuvenation of the women's movement in the 1960's and 1970's, the values which emphasize equality between the genders and which support women's employment outside the home gained increased acceptance by some segments of the population (Friedan, 1981). However, the values that underlie role expectations for women's domestic work appear to be slow to change. While there is evidence of increased support for the equal sharing of domestic tasks (Matthaei, 1982) and evidence for a limited increase in husbands' actual participation rates, women still perform the majority of household tasks, even if they also work outside the home (Coverman & Sheley, 1986). The research does not suggest a correlation

between attitudes regarding women's employment and husband's participation in domestic tasks (Berheide, Berk, & Berk, 1976; Maret & Finlay, 1984).

Thus, certain role expectations for wife-mothers appear to be changing. As more mothers have entered the workforce, role expectations have been modified, among some groups, such that mothers' employment outside the home is more acceptable. Meanwhile, however, an accommodating shift in role expectations within the home is slower in coming. This double burden may have consequences for women's ability to meet traditional role expectations associated with the home as well as expectations of the workplace.

The concept of "quality of role enactment" refers to "how well a person performs a role relative to the expectations for the role" (Burr et al., 1979, p.58). The degree of competence individuals show in meeting these expectations may be assessed by the individuals themselves or by others. In addition, this assessment may be more or less explicit.

Underlying the concept of quality of role enactment is the assumption that individuals strive, to some degree, to conform to norms and expectations. However, individuals may experience difficulty meeting the

expectations associated with the roles and positions that they occupy. One possible source of difficulty that has been examined is individuals' attempts to combine many roles or positions. The term "role strain" was introduced by Goode (1960) to describe the experience of "felt difficulty meeting (the) role obligations" of multiple roles.

The terms "role conflict" and "role overload" (Sieber, 1974) have been developed to elaborate on aspects of the processes by which individuals experience difficulty in combining roles. Role overload refers to "constraints imposed by time" (Sieber, 1974) which are felt to inhibit the ability to adequately fulfill role obligations. Thus, someone experiencing role overload would feel they had "too much to do in too short a time".

Role conflict refers to "discrepant expectations irrespective of time" (Sieber, 1974). These role expectations are such that complying with one set will violate the expectations of the others set (Sieber, 1974). Thus an individual experiencing role conflict will feel "torn" by the inability to enact both roles at once. For example, the man who has a sick child and must choose between staying at home (enacting the husband-father position) and going to the office (enacting the employee position), may be violating his employer's

expectations that he remain at work if he chooses to attend to his child, and violating expectations associated with the position of husband-father if he stays at work.

Time pressures and conflicting role obligations may be experienced independently of each other. Time pressures may interfere with the ability to fulfill all sets of role expectations associated with a given position. Or, a discrepancy in the nature of these expectations may be such that fulfilling one set precludes fulfilling another. It is also possible for both kinds of problems to occur simultaneously. Thus, the sources of role strain may vary in their temporal and/or behavioral origins.

Application of the terms role strain, role conflict, and role overload implies certain assumptions regarding the experience of time and energy resources. Their use is based on the assumption that time and energy are finite resources (Marks, 1977) and that enacting multiple roles is therefore necessarily stressful. Marks (1977) argues that prioritizing of roles plays an important role in people's abilities to "find" time for those activities they are committed to. The stress associated with enacting multiple roles may thus be reduced by this strategy for decreasing role overload.

In addition, Long and Porter (1984) point out that use of the terms role conflict and role overload also assumes that roles are always segregated in time and space. The authors suggest that these assumptions may not always hold true. They point out that women often enact the roles of wife and mother at the same time. Therefore, the addition of roles does not mean increased time pressures or conflicting demands under all circumstances.

There is evidence from the research examining the psychological outcomes of combining work and family roles that quality of experience in roles may be another factor influencing levels of role overload and role conflict. The work of Barnett and Baruch (1985), Baruch and Barnett (1986), Parry and Warr (1980), and Radloff (1975) suggests that the negative psychological outcomes of combining roles are alleviated by positive experiences in these roles. Thus, satisfaction with a role may be an important consideration when examining the psychological outcomes of combining roles.

This study examines the effects of combining work and family roles among academics from the perspective of Role Theory. The model guiding this research will be explored next.

Theoretical Model

The model being examined in this study explores the links between the workload associated with the positions of parent and of academic, and the experience of role overload. Figure 1 details the model.

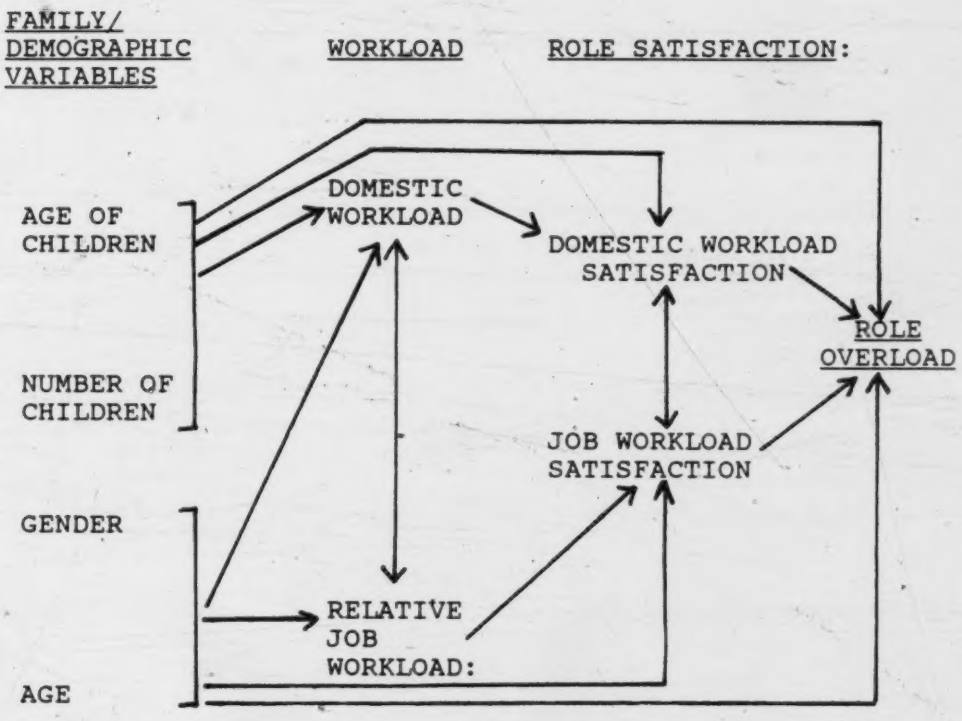

Figure 1. Model of workload and role overload among academics who are parents.

Role Satisfaction and Role Overload

The model proposes that the experience of role overload as a result of attempting to combine two or more positions is contingent, not only on the actual or

perceived workload associated with those positions, but also on the individual's affective response to this workload. Thus in combining the positions of parent and of academic, people who have a high workload and who are satisfied with this level, will be less likely to interpret time pressures as impinging on their ability to successfully fulfill their role obligations. They may be more willing to tolerate time pressures associated with work they enjoy. Or, as Marks (1977) suggests, they may prioritize this work and be willing to spend longer hours working on it.

On the other hand, for those individuals who are dissatisfied with a heavy workload in a particular task area, having such a workload will more likely be related to higher levels of role overload. The time spent on activities that are disliked may be perceived as interfering with the ability to engage in preferred activities. Thus the individual's definition and perceptions of the situation and their personal preferences are important considerations when examining the psychological outcomes of combining work and family roles.

Domestic Workload and Satisfaction

The tasks associated with the running of a household make up the domestic workload. Responsibility for seeing that these tasks get done is a role associated with the position of parent. Whether or not a parent actually performs a particular task, the responsibility for the planning and scheduling of that task is seen as an important element of her or his workload.

Family structure variables, such as the number of children, and stage in the family life cycle, as indicated by the age of children, may influence the kinds of tasks that need to be accomplished in the home. Thus in families with many and/or very young children, tasks such as arranging for child care and supervising children's social activities will be an important element of the workload of parents. In families with older children, responsibility for these tasks is less likely to be assigned solely to parents (Pleck, 1981a; Robinson, 1977).

Gender is an important influence on the domestic workload of parents. The literature indicates that women continue to bear responsibility for most domestic tasks even if they are employed. Men spend less time in and have less responsibility for most domestic tasks than do

women (Barnett & Baruch, 1987; Berardo, Shehan, & Leslie, 1987; Berheide, Berk, & Berk, 1976; Berk, 1985; Berk & Berk, 1979; Coverman & Sheley, 1986; Lein, 1984; Maret & Finlay, 1984; Pleck, 1983; Robinson, 1977; Spitze, 1988; Yogev, 1981). The tasks that men tend to have responsibility for are likely to be flexible and intermittent in their timing and to focus on the maintenance of the house and environs (Lein, 1984).

It is expected that the impact of age and number of children on the level of responsibility for tasks not related to children will be weaker for mothers than for fathers. Regardless of the age or number of children in the family, women will be more likely than men to bear the primary responsibility for tasks such as housekeeping, that are not solely related to children, (Pleck, 1983; Robinson, 1977).

Satisfaction with domestic workload appears to be related to the kinds of tasks that individuals have responsibility for. It is suggested that higher levels of responsibility, particularly for non-child related tasks, will be associated with lower levels of satisfaction (Benin & Agostinelli, 1988).

The literature suggests that there may be gender differences in the level of responsibility that is

associated with satisfaction with the division of domestic labour (Benin & Agostinelli, 1988; Yogev & Brett, 1983). For women, "help" from their partners, particularly with housekeeping chores, may contribute to satisfaction. Even a limited amount of assistance represents a decrease in the amount of work they have to perform. For men, providing assistance constitutes an increase in their workload. Depending on the desirability of the task, this responsibility will be related to satisfaction levels.

Job Workload and Satisfaction

When examining the time pressures associated with combining work and family roles, it is important to consider not only domestic workload, but job workload as well. "Time use" studies are one way of establishing the workload associated with various job-related tasks. Another important consideration, however, is employees' perceptions regarding their workload. Theorists of organizational behavior have stressed that behavior is influenced at least as much by the individuals' perception of their work environment as by its "reality" (Moos, 1986; Porter & Lawler, 1968; Smith, Kendall & Hulin, 1969)

The amount of work that individuals perceive they do relative to their colleagues may be influenced by family structure and life cycle variables. The demands associated with having children, particularly young children, may influence the amount of work that individuals have at home and, in turn, the amount of work they can take on at work. Since women assume responsibility for most household tasks, women may be more likely than men to need a reduced job workload.

Satisfaction with job-related workload may be influenced by the perception that this workload is equitable compared with colleagues in similar occupations and who are receiving similar levels of recognition (Porter & Lawler, 1968). Thus, it is expected that the degree to which faculty perceive that they carry a workload heavier than that of their colleagues of similar rank will be correlated with lower levels of job workload satisfaction.

Workload and Role Overload

For both domestic and job workload, satisfaction with workload in each of these domains will play an important part in mediating the relationship between workload and role overload. At a given level of workload, satisfaction with that workload will reduce the

level of role overload experienced. Those individuals who are satisfied with the amount of work they do in a given task, will be more likely to tolerate a greater amount of time spent in that task than someone who is dissatisfied, and will experience less overload as a result. Thus the greater the number of task areas that individuals are satisfied with, the less likely they are to experience role overload.

It is expected that the demographic variables will be related indirectly to role overload via their direct relationship to domestic and job workload. However, the possible direct effects of these variables on role overload are included in the model being tested here.

Summary

In summary, the model proposes that the amount of work that individuals perform at home or on the job will be related to certain demographic and personal variables. In turn, satisfaction with workload, at home and on the job, will mediate the relationship between workload and role overload. For a given level of workload, satisfaction with that workload will be related to the level of role overload that is experienced.

Some of the relationships in this model can be predicted based on findings reported in the literature.

The following hypotheses are based on these findings and were tested in the course of answering the research questions.

Hypotheses:

1) The perceived domestic workload of women will be different from that of men.

2) Women will report lower levels of satisfaction with their total domestic workload than men.

3) There will be gender differences in the level of responsibility that is associated with satisfaction in specific tasks that make up the domestic workload such that:

a) women who share responsibility for housekeeping will be more satisfied than those who have sole responsibility for this task.

b) men who share responsibility for housekeeping will have lower levels of satisfaction than those whose spouses have sole responsibility for this task.

4) a) Women will have lower levels of job workload in graduate teaching and in research and higher committee workloads than men.

b) Women will report lower overall levels of relative job workload than men.

5) Women will report significantly higher levels of role overload than men.

6) Number of children, age of youngest child, gender of respondent, and age of respondent will be significantly related to domestic workload and relative job workload.

7) Number of children, age of youngest child, gender of respondent, age of respondent, and domestic workload will be significantly related to domestic workload satisfaction.

8) Number of children, age of youngest, gender of respondent, age of respondent, and relative job workload will be significantly related to job workload satisfaction.

9) Number of children, age of youngest, gender of respondent, age of respondent, relative job workload and

domestic workload will be significantly related to role overload.

10) The relationship between domestic workload and role overload will be mediated by satisfaction with domestic workload.

11) The relationship between job workload and role overload will be mediated by satisfaction with job workload.

The methods used to test these hypotheses will be described in the following chapter. The issues of data collection, instrumentation, data analysis, and the management of missing data will be outlined also.

CHAPTER IV

METHODOLOGY

This study was based on the secondary analysis of data collected in a study of members of the Association of Academic Staff at the University of Alberta (AAS:UA) (Jamieson & Kieren, 1990). This chapter includes a description of those aspects of the original study that relate specifically to the current analysis, as well as a description of the methods employed in this study.

Sample

The primary population of the original study was female members of the Association of the Academic Staff of the University of Alberta (AAS:UA). The original sample included 333 female members representative of the constituent groups of the AAS:UA. These groups were: faculty, faculty service officers (FSO), administrative professional officers (APO), and librarians. The stratified random sample of these groups was drawn based on guidelines for sampling provided by the Population Research Laboratory at the University of Alberta. A smaller stratified random sample of 99 male Academic

Staff was included in the original study for comparison purposes.

The purpose of this study was to examine the experiences of academics who are parents. Thus, respondents who were married and/or cohabiting, and who had children living with them, were selected from respondents to the original study. Table 1 reports the characteristics of the sample used in this study.

Table 1. Constituent membership by gender

	Female #(%)	Male #(%)
Librarians	7 (14)	4 (16)
FSO	*	*
APO	8 (16)	4 (16)
Assistant Prof	10 (20)	1 (4)
Assoc Prof	11 (22)	9 (36)
Full Professor	13 (26)	7 (28)
Total	50 (100)	25 (100)

* Because of their small population, FSO's were included in the Faculty category for the purposes of analysis.

Data Collection

The questionnaire was developed by the original study researchers and was pilot-tested by a panel consisting of 15 members of the academic staff including representatives of each of the major academic staff categories. A revised version of the questionnaire was further screened by three people not otherwise involved in the study. The Faculty of Education Ethics Review

Committee approved the study proposal and instrumentation on ethical grounds.

The questionnaire was distributed by mail. Two reminder letters were sent following distribution of the original questionnaire. The first reminder was sent out within one week of the questionnaire, the second within three weeks. The response rate for the female portion of the original sample was 51.4 per cent, and 38.4 per cent for the male portion.

Instrumentation

The full questionnaire is reported in Appendix A. The demographic variables of interest in this study were age and gender of respondent, number of children, and age of youngest child. These variables were measured by single item measures (Appendix A, item #50, 52).

The outcome variable, role overload was measured using a modified version of the role overload subscale compiled by Hawkins and Rovine (1988). The subscale was developed as a result of a factor analysis of the Job-Family Role Strain Index of Bohen and Viveros-Long (1981). Hawkins and Rovine's (1988) role overload subscale consisted of five items assessing physical and emotional role overload associated with attempting to

combine work and family roles (Appendix A, item #45:1)-6)).

A sixth item, ("I wish I had more time to do things for my family") was included in the role overload scale in this study. This item was grouped by Hawkins and Rovine (1988) with a different sub-scale in their factor analysis of the Job-Family Role Strain Index. It was included with the role overload items in this analysis because it "fit" theoretically and the subscale Alpha increased, slightly, from .814 to .843 when the item was included (Alpha for the six item scale=.843). Furthermore, factor analysis of the six items indicates that this item loads on the same factor as the remaining five in the original subscale (Appendix B).

The items measuring domestic and job workload, and domestic and job workload satisfaction, were developed by the researcher. Domestic workload was measured using responses to questions regarding the division of responsibility for domestic tasks. The item asked "Who in your household has primary responsibility for the following tasks?". The task areas included responsibility for child care arrangements, child social activities, regular housekeeping, personal care of family members, and home maintenance. The response categories

in this item were "Partner/spouse", "Shared Equally", and "Self" (Appendix A, item #54).

The variable domestic workload satisfaction was measured using responses to the question: "How satisfied are you with the level of responsibility you have for the following tasks in the home?". The question itemized the same list of five task areas as in the domestic workload question. The response categories for these items were "highly dissatisfied", "dissatisfied", "neutral", "satisfied", "highly satisfied" (Appendix A, item #56).

The variable relative job workload was measured by responses to questions regarding the respondents' relative workload in ten job task areas. The statement: "On average, compared with other staff members of equivalent rank in my department my...load is... " had the following response categories "much lighter", "lighter", "equal", "heavier", and "much heavier" (Appendix A, item #25).

Job workload satisfaction was measured using questions about satisfaction with workload in nine job task areas. The response categories were "highly dissatisfied", "dissatisfied", "neutral", "satisfied", and "highly satisfied" (Appendix A, item #26).

Construction of Indices

The term index is used here to refer to measures that were calculated by the combination of two or more measures (Kerlinger, 1986). Indices were constructed to measure the main independent and dependent variables. A description of how each index was calculated is given below.

Role overload was defined as the frequency with which respondents perceive time constraints to interfere with their ability to fulfill work and family roles. It was operationalized using the role overload index. Scores on this index were calculated by summing scores on the six role overload items. There was a possible range of scores on the index from 6, indicating low overload on each item, to 30, indicating a high level of overload on every item.

Domestic workload was defined as the relative level of responsibility that respondents report they have for domestic tasks relative to that of their spouses and was operationalized using the domestic workload index. Scores on this index were calculated by summing responses to the five items concerning the division responsibility for domestic tasks. The range of possible scores on this index was from 0 (no responsibility for any tasks because

partner/spouse has responsibility for all of them) to 10 (self responsibility for all tasks) (Alpha=.598).

The variable domestic workload satisfaction was defined as the respondents' affective response to their perceived domestic workload. It was operationalized by an index which calculated the number of domestic task areas in which the respondent reported satisfaction. Factor analysis of the six items in this index indicated that they loaded on two factors. An increase in the number of variables was undesirable due to the small sample size. Therefore, to calculate the index, the responses to the domestic workload satisfaction items were dichotomized into: (0) "not satisfied" (highly dissatisfied to neutral), and (1) "satisfied" (satisfied and highly satisfied). Scores on these five items were then summed. Thus, the possible range in scores on the index was from 0, not satisfied with every task, to 5, satisfied with every task (Alpha=.722).

Relative job workload was defined as the amount of work that respondents perceive they have relative to that of their colleagues. This variable was operationalized by scores on the relative job workload index. Scores on this index were calculated by summing responses to the ten items regarding level of workload relative to that of colleagues. The range of possible scores on this index

was from 10 (much lighter workload on every item) to 50 (much heavier workload on every item) (Alpha=.737).

Job workload satisfaction was defined as the affective response to the perceived job workload. It was operationalized by an index that measured the number of job task areas in which the respondent reported satisfaction. Factor analysis of the nine items in this index indicated that they loaded on four factors. In order to keep the number of variables to a minimum, the job workload satisfaction index was created by dichotomizing responses into two categories: (0) "not satisfied" (highly dissatisfied to neutral) and (1) "satisfied" (satisfied and highly satisfied). Scores on the index were then calculated by summing across scores on all nine items. The range of possible scores on this index was from 0 (not satisfied with workload in every task) to 9 (satisfied with workload in every task) (Alpha=.738).

Data Analysis

Descriptive statistics were used to describe the sample on the demographic variables. Descriptive statistics were also used to provide profiles of the sample on the following major variables:

a) Domestic workload
b) Relative job workload

c) Domestic workload satisfaction
d) Job workload satisfaction
e) Role overload.

The hypotheses were then tested using the following non-parametric and parametric statistical procedures. A probability level of $p<.05$ was used as the criteria for significance in all statistical tests.

Hypotheses one through five predicted gender differences on a selection of these variables. These hypotheses were tested using Chi-square, z-scores, and t-tests where appropriate.

The next set of hypotheses (six through nine) predicted significant relationships between sets of selected personal and family variables, perceived domestic and job workload, satisfaction with perceived domestic and job workload, and role overload. The relationships between these variables were explored using multiple regression. Forced entry of sets of the independent variables were used to test the model.

The remaining hypotheses predicted that workload satisfaction mediates the relationship between workload and role overload. Specifically, these hypotheses focused on the relationships between job and domestic workload, their respective satisfaction measures, and role overload. Path analysis techniques were used to

test these hypotheses. The standardized Beta scores and Pearson correlations were used to estimate the relationships between the specified variables and to test for the mediating effects of the workload satisfaction variables.

Management of Missing Data

The presence of missing data can interfere with index construction by causing the removal of cases from the analysis. Researchers have suggested many ways of dealing with missing data (Anderson, Basilevsky, & Hum, 1983). The most conservative solution for missing data involves deleting from the analysis any cases with a single missing item. This solution can lead to a considerable reduction in the number of valid cases. Thus it is important to consider other options which preserve cases without biasing the data, particularly in small data sets such as the one used in this study.

Unique characteristics of the sample in this study resulted in considerable missing data on particular items. The occupational categories that made up the sample included faculty, faculty service officers, administrative professional officers, and librarians. Examination of the data set revealed that patterns in the missing data on some of the items were consistent with an

inability on the part of some respondents to answer questions. This was because these questions referred to tasks which certain categories of academic staff did not normally perform. For example, the fact that librarians, FSO's, and APO's do not normally have a teaching load meant that they responded to these items with "not applicable" (University of Alberta, 1983a, 1983b, 1983c, 1988).

In order to preserve cases a rationale was developed for the recoding of this type of missing data on the index items. This recoding retrieved information that would have been lost as a result of the original coding, regarding the workload of non-faculty academic staff. On the items related to teaching, for example, individuals from occupational groups who do not normally teach, such as APO's, FSO's, and librarians, and who responded "not applicable" to these items were recoded as "equal" to their colleagues. Their workload is equal to that of their colleagues in the sense that none of them have teaching responsibilities. This procedure was used to retain information on items central to the workload of faculty and to reduce the amount of missing data that emerged due to differences in the nature of the workloads of the two occupational groups.

Sample means were used to replace the missing data on single item measures, including number of children, and age of youngest child. A total of 13 such replacements were made.

The statistical procedures outlined above were applied to the data. The next chapter will include an outline of the results of these analyses.

CHAPTER V

RESULTS

This chapter will include a description of the results of the statistical analysis. A description of the sample on the demographic variables will be followed by a summary of the significant results as they relate to the research questions and corresponding hypotheses.

Sample Description

Fifty female and twenty-five male respondents from the original study fit the sample criteria described for this study in Chapter Four. Descriptive statistics for the sample used in this study were run on the demographic variables age of youngest child, number of children, and age of respondent. The age of youngest child ranged from 1 to 24 years, with a mean age of 8.99 years. Though the children of female respondents were, on average, slightly younger (8 years) than those of males (10 years), this difference was not statistically significant (Appendix C, Table C-1).

Respondents had from one to five children and averaged 1.65 children. On average, the men had slightly larger families (2.0 children) than the women (1.4 children),

though this difference was not statistically significant either. Response categories for age of respondent ranged in ten year spans from 25-35 years to 56-65 years. The modal category for both gender groups was the category 36-45 years (see Appendix C, Tables C-1,C-2).

Descriptive Profile of Key Variables and Hypothesis One

The following descriptive profile of the sample provides background information for the testing of the key hypotheses. A profile is provided for domestic and job workload, domestic and job workload satisfaction and role overload. Data related to the testing of relevant hypotheses will be reported in each section .

Domestic Workload

The frequency distribution for the domestic workload items clearly illustrates a gender based division of responsibility for the tasks specified. With the exception of home maintenance tasks, women are more likely than men to have sole responsibility for domestic tasks. They are also more likely than men to report that tasks are shared (Table 2). In every task area, except home maintenance and responsibility for child care, the category for women with the highest frequency of responses was the "shared" category.

Hypothesis one, that the perceived domestic workload of women will be different from that of men, was tested using Chi-square tests for significant gender differences in expected and observed frequencies. The results were significant for every task area.

Table 2. Frequency distributions for gender groups on categories of the domestic workload items

Item		Spouse #(%)	Shared #(%)	Self #(%)	Chi^2 (Sig)
Responsibility for child care	F	11(22)	19(38)	20(40)	
	M	19(76)	5(20)	1(4)	21.55*
Responsibility for child social activities	F	5(10)	28(56)	17(34)	
	M	12(48)	11(44)	2(8)	15.58*
Responsibility for housekeeping	F	2(4)	24(48)	24(48)	
	M	16(64)	8(32)	1(4)	35.68*
Responsibility for personal care of family	F	0(0)	27(54)	23(46)	
	M	7(28)	17(68)	1(4)	23.75*
Responsibility for household maintenance	F	19(38)	21(42)	10(20)	
	M	3(12)	6(24)	16(64)	14.64*

* Gender differences significant at $p<0.01$

These significant differences were also reflected in gender differences on the mean scores for the domestic workload index (Table 3). Women had significantly higher scores on the domestic workload index indicating that they reported sole responsibility for more domestic tasks than did the men.

Table 3. Sample means and standard deviations on total domestic workload scores

	Sample Mean (S.D.)	Female Mean (S.D.)	Male Mean (S.D.)	T-score (Sig)
Total Domestic Workload Score	5.29 (2.3)	6.61 (2.0)	3.56 (1.9)	-5.41 ***

*** Gender differences significant at p=.0001

Domestic Workload Satisfaction and Hypotheses Two - Three

Sample means for the items that constitute the domestic workload satisfaction index ranged from a low of 0.57 for satisfaction with housekeeping, to a high of 0.77 on satisfaction with responsibility for personal care of family members. The range of scores varied between females and males. Among women the lowest score (0.48) was for satisfaction with housekeeping, and the highest score (0.70) was for satisfaction with child activities and personal care of family members. Among males, the lowest satisfaction (0.72) level was for child care, and the highest (0.92) was for personal care of family members. The responses for these items were re-coded to (0,1), thus, the mid-point of 0.5 indicates the cut-off between satisfied and not satisfied. This suggests that, on average, the only task women are not satisfied with is responsibility for housekeeping, and that men are satisfied with their level of responsibility in every task area.

Hypothesis two stated that women will report lower levels of satisfaction with their total domestic workload than men. As a group, women had a significantly lower mean score than men on the domestic workload satisfaction index (Table 4). A significant gender difference on the items making up the domestic workload satisfaction index appeared only on responses to "satisfaction with responsibility for housekeeping". The mean satisfaction score for women on this item was lower than that of men (Table 4).

Table 4. Mean scores and standard deviations for Domestic Workload Satisfaction Items and Index

Item	Sample Mean (S.D.)	Female Mean (S.D.)	Male Mean (S.D.)	T-score (Sig)
Satisfaction with child care	0.68 (0.47)	0.66 (0.48)	0.72 (0.46)	0.52
Satisfaction child activities	0.73 (0.45)	0.70 (0.46)	0.80 (0.41)	0.92
Satisfaction with housekeeping	0.57 (0.50)	0.48 (0.50)	0.80 (0.41)	2.93 **
Satisfaction with personal care	0.77 (0.42)	0.70 (0.46)	0.92 (0.28)	K-S Z 0.90*
Satisfaction with home maintenance	0.71 (0.46)	0.62 (0.49)	0.88 (0.33)	K-S Z 1.06*
Domestic Workload Satisfaction Index	3.47 (1.5)	3.14 (1.6)	4.12 (1.3)	2.63 **

* Non-parametric tests were run on this variable because the t-test results indicated a significant difference in the variances of the two groups: Kolmogorov-Smirnov Z-score (not significant)
** Gender differences significant at p=.01

Cross-tabulations on the individual items that make up the domestic workload index and the domestic workload satisfaction index were run for each gender group to test hypotheses number three:

a) women who share responsibility for housekeeping will be more satisfied than those who have sole responsibility for this task.

b) men who share responsibility for housekeeping will have lower levels of satisfaction than those whose spouses have sole responsibility for this task.

Each area of domestic responsibility was cross-tabulated with the satisfaction item for that task. The results are reported below (Tables 5 and 6).

These cross-tabulations revealed some gender differences in the distribution of responsibility associated with satisfaction. With regard to the first hypothesis tested here, women were more likely to be satisfied when responsibilities for both child care arrangements and for regular housekeeping were shared, and women were most likely to be dissatisfied when they had sole responsibility for these tasks. Men, however, were most likely to be satisfied when their spouses had these responsibilities. However, contrary to part b) of the hypothesis, all of the men who reported that they share housekeeping responsibilities reported satisfaction with this level of responsibility.

Their small numbers (8) however, make this observation tentative.

Table 5. Frequencies and percentages for females by category of domestic workload tasks and domestic workload satisfaction with those tasks

Satisfaction Level	Dissatisfied #(%)	Neutral #(%)	Satisfied #(%)
Task/Resp Level			
Responsibility for Child Care			
Spouse/partner	0(0)	6(5)	5(15)
Shared	0(0)	4(36)	15(46)
Self	6(100)	1(9)	13(39)
	6(100)	11(100)	33(100)
Responsibility for Child Social Activities			
Spouse/Partner	0(0)	4(40)	1(3)
Shared	0(0)	4(40)	24(69)
Self	5(100)	2(20)	10(29)
	5(100)	10(100)	35(100)
Responsibility for Regular Housekeeping			
Spouse/Partner	1(5)	0(0)	1(4)
Shared	5(23)	2(40)	17(74)
Self	16(73)	3(60)	5(22)
	22(100)	5(100)	23(100)
Responsibility for Home Maintenance			
Spouse/Partner	1(11)	5(50)	13(42)
Shared	3(33)	1(10)	17(55)
Self	5(56)	4(40)	1(3)
	9(100)	10(100)	31(100)
Responsibility for Personal Care of Family			
Spouse/Partner	0(0)	0(0)	0(0)
Shared	7(100)	2(25)	25(71)
Self	0(0)	6(75)	10(29)
	7(100)	8(100)	35(100)

Bold type indicates satisfaction category with highest frequency.

Table 6. Frequencies and percentages for males by category of domestic workload tasks and domestic workload satisfaction with those tasks

Satisfaction Level	Dissatisfied #(%)	Neutral #(%)	Satisfied #(%)
Task/Resp Level			
Responsibility for Child Care			
Spouse/partner	3(100)	4(100)	12(67)
Shared	0(0)	0(0)	5(28)
Self	0(0)	0(0)	1(6)
	3(100)	4(100)	18(100)
Responsibility for Child Social Activities			
Spouse/Partner	3(100)	2(100)	7(35)
Shared	0(0)	0(0)	11(55)
Self	0(0)	0(0)	2(10)
	3(100)	2(100)	20(100)
Responsibility for Regular Housekeeping			
Spouse/Partner	2(100)	2(67)	12(60)
Shared	0(0)	0(0)	8(40)
Self	0(0)	1(33)	0(0)
	2(100)	3(100)	20(100)
Responsibility for Home Maintenance			
Spouse/Partner	1(100)	1(50)	1(5)
Shared	0(0)	0(0)	6(27)
Self	0(0)	1(50)	15(68)
	1(100)	1(100)	22(100)
Responsibility for Personal Care of Family			
Spouse/Partner	0(0)	1(50)	6(26)
Shared	0(0)	1(50)	16(70)
Self	0(0)	0(0)	1(4)
		2(100)	23(100)

Bold type indicates satisfaction category with highest frequency.

These tables revealed some additional patterns of interest. Men and women were more likely to be satisfied when responsibility was shared both for child's social activities and for personal care of family members. With

regard to home maintenance, women were more likely to be satisfied when this responsibility was shared, but men were most likely to be satisfied when they had sole responsibility for this task area.

Relative Job Workload and Hypothesis Four

On the items that make up the relative job workload index the means for the entire sample ranged from a low of 2.69, for university committee load, to a high of 3.53, for total workload. Because the range of possible scores on each of these items is from one to five, with a mid-point of 3.0, the scores suggest that on average, academics perceived themselves to have a workload that ranged from slightly lighter to slightly heavier than that of their colleagues.

Hypothesis number 4a) stated that women will have lower levels of job workload in graduate teaching and in research and higher committee workloads than men. Significant gender differences emerged on two of the items that make up the job workload index. Men's perceived research and graduate teaching workloads, relative to those of their colleagues, are heavier than those of women. (Table 7). This suggests that men were more likely than women to perceive that they have a heavier workload than their colleagues.

Table 7. Mean scores on Job Workload Items and Index

Item	Sample Mean (S.D.)	Female Mean (S.D.)	Male Mean (S.D.)	T-score Sig
Total workload	3.53 (0.87)	3.52 (0.89)	3.56 (0.87)	0.19
Research load	3.36 (0.77)	3.22 (0.71)	3.64 (0.81)	2.31*
University committee load	2.69 (1.17)	2.70 (1.27)	2.68 (0.99)	-0.07
Faculty committee load	2.71 (1.33)	2.84 (1.33)	2.44 (1.33)	-1.24
Departmental committee load	2.87 (1.36)	3.00 (1.39)	2.60 (1.29)	-1.21
Administrative load	2.99 (1.41)	3.00 (1.43)	2.96 (1.40)	-0.13
Professional service load	2.94 (1.25)	2.87 (1.20)	3.08 (1.35)	0.70
Community service load	2.71 (1.47)	2.70 (1.37)	2.72 (1.67)	0.06
Undergraduate course load	3.11 (0.86)	3.06 (0.94)	3.20 (0.71)	0.64
Graduate course load	2.73 (1.16)	2.54 (0.16)	3.12 (1.05)	2.10*
Relative Job Workload Index	29.64 (6.4)	29.46 (6.2)	30.00 (7.0)	0.33

* Gender differences significant at p=.05

The mean score for the entire sample on the job workload index was 29.64. This score, out of a possible range from ten to 50 with a mid-point of 30, suggests that academics tend to perceive their workload to be roughly equivalent to that of their colleagues. The results do not

support hypothesis 4b) that women will report lower overall levels of relative job workload than men. There were no significant gender differences in mean scores for the job workload index (Table 7).

Job Workload Satisfaction

The sample means for the items in the job workload satisfaction index ranged from 0.39, for satisfaction with undergraduate course load, to 0.52, for satisfaction with research and total workload. Because the scores for these items were re-coded to (0,1), the mid-point in the range of possible scores (0.5) represents the cut-off between satisfied and not satisfied: respondents scoring below 0.5 were not satisfied, and those scoring above 0.5 were satisfied. Thus, respondents reported satisfaction with only total workload and research load (Appendix C, Table C-3).

These findings are reflected in the scores for the total relative job workload index. The mean score for the entire sample on the job workload satisfaction index was 4.01 (Appendix C, Table C-3). Nine items made up the index, with a range of possible scores on each item of from 0 to 1, and a possible range of scores on the index of from 0 to 9. Thus, respondents scoring above the midpoint (4.5) on the index indicated satisfaction with the majority of job tasks.

The sample mean on the index suggests that academics are not satisfied with a majority of the tasks that make up their job workload.

No hypotheses regarding levels of job workload satisfaction were suggested by the research. No significant gender differences emerged on the job workload satisfaction items or on the job workload satisfaction index (Appendix C, Table C-3).

Role Overload and Hypothesis Five

Hypothesis five stated that women will report significantly higher levels of role overload than men. There were no significant gender differences on scores for the individual items that constitute the role overload index. Mean scores for the entire sample ranged from 3.19 on "I feel emotionally drained when I get home from work", to 3.84 for "I feel I don't have enough time for myself" (Appendix C, Table C-4). Since the mid-point on this index was 3.0, the results suggest that respondents feel overloaded on every item on the index at least "some of the time".

The mean score for the whole sample on the role overload index measure was 21.28. Since the range of possible scores on this index is from six to 30, with a mid-point of 18, this finding also suggests that respondents

feel somewhat overloaded. There were no significant differences on the mean scores of the gender groups for the role overload index (Appendix C, Table C-4).

Hypothesis Six

Hypothesis six stated that number of children, age of youngest, gender of respondent, age of respondent will be significantly related to domestic workload and relative job workload. To test this hypothesis, each of the domestic workload and relative job workload indexes were regressed on the explanatory variables. This set of independent variables explained a significant proportion of the variance in both domestic (34 per cent, $F=8.694$, $p=0.0001$) and job workload (14 per cent, $F=3.0$, $p=0.05$)).

While the regression equation for the dependent variable domestic workload was significant, only respondent's gender was significantly related to domestic workload. Gender of respondent contributed 22 percent of the explained variance in domestic workload. Being female was related to having a higher level of domestic workload (Table 8).

Table 8. Regression of Domestic Workload Scores on personal and family variables

Dependent Variable: Domestic Workload Score

Independent Variables	Regression Coefficient (T score)	Standardized Beta Coefficient	Percent Explained Variance
Constant	5.25 (5.26)		
Number of children	-.054 (-.18)	-.019	.04
Age of youngest	-.031 (-.764)	-.091	.85
Gender of Respondent	2.302 (4.465)***	.474	22.37
Age of Respondent	-.528 (-1.385)	-.166	2.69

F=8.694, (significant at p=0.0001)
R^2=.335, Adjusted R^2=.297
*** Significant at p=0.00001

Though the regression equation for relative job workload was significant, only age of respondent was significantly related to the dependent variable and it contributed 5.5 per cent of the explained variance in job workload (Table 9). Older respondents were more likely to perceive their workload to be heavier than that of their colleagues.

Table 9. Relative Job Workload Scores regressed on personal and family variables.

Dependent Variable: Relative Job Workload Score

Independent Variables	Regression Coefficient (T score)	Standardized Beta Coefficient	Percent Explained Variance
Constant	22.44 (7.07)		
Number of children	-0.007 (-0.008)	.000	.00
Age of youngest	0.172 (1.327)	.179	2.46
Gender of Respondent	0.756 (.462)	.055	.31
Age of Respondent	2.418 (1.996)*	.270	5.48

F=3.0 (significant at p=.05)
R^2=.14, Adjusted R^2=.09
* Significant at p=.05
*** Significant at p=0.00001

Hypothesis Seven

Hypothesis seven stated that number of children, age of youngest child, gender of respondent, age of respondent, and domestic workload will be significantly related to domestic workload satisfaction.

To test this hypothesis, scores on the domestic workload satisfaction index were regressed on the explanatory variables. In combination the family structure, personal and workload variables contributed significantly to the variance in domestic workload. However, individually

none of these variables was significantly related to domestic workload satisfaction (Appendix C, Table C-5).

Condition number bounds (51.064) for this regression equation suggested that there was moderate multicollinearity among the independent variables. The t-test and regression results for domestic workload indicated a relationship between domestic workload and gender. The variable gender was therefore removed from the equation. The results of this regression indicated that when the effects of gender are not controlled for, domestic workload has a significant, negative relationship to domestic workload satisfaction (Table 10). Thus, for the whole sample, higher levels of responsibility for domestic tasks were associated with lower domestic workload satisfaction.

Hypothesis Eight

Hypothesis eight stated that number of children, age of youngest, gender of respondent, age of respondent, and job workload will be significantly related to job workload satisfaction. This hypothesis was tested by regressing scores on the job workload satisfaction index on the explanatory variables on. The family structure, life cycle, personal variables, and job and domestic workload did not contribute significantly to the variance in job workload satisfaction, nor were any of these variables significantly

correlated with the outcome variable (Appendix C, Table C-6).

Table 10. Domestic Workload Satisfaction Scores regressed on workload, personal, and family variables (excluding gender).

Dependent Variable: Domestic Workload Satisfaction Score

Independent Variables	Regression Coefficient (T score)	Standardized Beta Coefficient	Percent Explained Variance
Constant	4.470 (3.929)		
Job Workload Index	-.047 (-1.625)	-.19	3.72
Number of Children	.340 (1.496)	.171	3.17
Domestic Workload Index	-.179 (-2.198)*	-.260	6.60
Age of Youngest	-0.022 (-.724)	-.097	0.76
Age of Respondent	.460 (1.518)	.210	3.28

F=3.058 (Significant at p=.05)
R^2=.18, Adjusted R^2=.12
* Significant at p=.05
** Significant at p=.001

Hypothesis Nine

Hypothesis nine stated that number of children, age of youngest, gender of respondent, age of respondent, job workload and domestic workload will be significantly related to role overload. To test this hypothesis scores on the role overload index were regressed on this set of explanatory variables .

This equation explained 32 per cent of the variance in role overload, and three variables emerged with significant negative relationships to role overload: age of youngest child (B=-.176) job workload (B=.207), and job workload satisfaction (B=-.524). Higher levels of role overload were associated with lower age of youngest child, heavier relative job workload, and lower levels of job workload satisfaction (Table 11).

High condition number bounds (1.705 - 89.461) however, suggest that there is a high degree of multicollinearity among the independent variables included in this equation. Some of the independent variables may be correlated with each other. Studenmund and Cassidy (1987) state that multicollinearity can result in changes to the regression results. The Beta coefficients will be unbiased and the R^2 will be unaffected, however, the variance of the Beta coefficients will become larger, and t-scores will be lower than they would be in the absence of multicollinearity. That is, more independent variables in the equation may have been significantly related to role overload than were indicated by the results of the regression.

Studenmund and Cassidy (1987) suggest that one strategy for dealing with multicollinearity is the removal of one variable in a set of correlated variables. In view of the previously identified relationship between gender and

domestic workload, the variable gender was removed from the equation in a separate analysis. The removal of this variable did not change the significance of the remaining variables in the equation or the overall significance of the equation.

Table 11. Role Overload Scores regressed on personal, family, workload, and workload satisfaction variables.

Dependent Variable: Role Overload Score

Independent Variables	Regression Coefficient (T score)	Standardized Beta Coefficient	Percent Explained Variance
Constant	20.77 (7.72)		
Number of Children	-.081 (-.164)	-.018	0.04
Age of Youngest	-.176 (-2.637)*	-.334	9.67
Gender of Respondent	-.074 (-.077)	-.010	0.00
Age of Respondent	.013 (.020)	.003	0.00
Domestic Workload Index	-.167 (-.847)	-.109	1.10
Job Workload Index	.207 (3.356)**	.378	14.75
Domestic Workload Satisfaction	-.260 (-1.022)	-.116	1.59
Job Workload Satisfaction	-.524 (-3.451)***	-.366	15.52

F=3.964 (Significant at p=.001)
R^2=.328, Adjusted R^2=.245
* Significant at p=.05
** Significant at p=.01
*** Significant at p=.001
**** Significant at p=.00001

Hypotheses Ten and Eleven

Hypotheses ten and eleven were concerned with the role that satisfaction with workload plays in mediating the relationship between workload, at home and on the job, with role overload. These hypotheses stated:

10) The relationship between domestic workload and role overload will be mediated by satisfaction with domestic workload.

11) The relationship between job workload and role overload will be mediated by satisfaction with job workload.

For these hypotheses to be supported, the results must indicate that each workload variable is significantly related to the corresponding workload satisfaction variable. In turn, the workload satisfaction variables must also be related to role overload. The regression results do not indicate that these conditions were met. There was no evidence for a relationship between job workload and job workload satisfaction. These two variables appear to influence the level of role overload independently of each other. Similarly, though domestic workload and domestic workload satisfaction were significantly related, domestic workload satisfaction was not significantly related to role overload. Further testing of these hypotheses was not pursued.

Summary

The results of this study indicated a gender difference in the division of responsibility for domestic tasks which reflected a traditional division of labour in the home. Women had responsibility for the traditionally "female" tasks. Overall levels of satisfaction with the domestic division of labour were lower among women than among men. In particular, women were dissatisfied with their level of responsibility for regular housekeeping tasks. When the effects of gender were not controlled for, higher levels of domestic responsibility were associated with lower levels of satisfaction with this workload.

Gender differences emerged in the level of responsibility that was associated with satisfaction in each type of domestic task. Women were most likely to be satisfied when responsibility for all tasks was shared. Men's preferred level of responsibility appeared to vary with the type of task considered. They were most satisfied with maintaining responsibility for traditional "male" tasks of home maintenance. They also appeared to be willing to share responsibility for some traditionally "female" tasks, such as children's social activities and personal care of family members. However, the results also suggest that men prefer that their spouse/partners maintain responsibility

for other "female" tasks such as arranging for child care and regular housekeeping.

Neither domestic workload nor domestic workload satisfaction were related to role overload. The only family variable significantly related to role overload was age of youngest child. The older the youngest child, the lower the level of role overload.

With respect to job related tasks, the results suggest a significant degree of gender differentiation in some aspects of perceived workload: men perceive themselves to have heavier research and graduate teaching loads. However, this gender difference was not apparent on the measure of overall job workload. Neither were there any significant gender differences in levels of job workload satisfaction, overall or in specific task areas.

Of the explanatory variables included in this regression equation, only age of respondent was significantly, and negatively, related to job workload. In combination these variables explained a significant proportion of the variance in job workload satisfaction. However, individually none of these variables was significantly related to satisfaction with job workload.

Relative job workload, job workload satisfaction, and age of youngest child were significantly related to role overload. Higher perceived relative job workload was positively related to role overload, while job workload satisfaction was inversely related to role overload. In combination with age of youngest child, these two variables explained a significant proportion of the variance in role overload.

These results will be examined in more detail in the next chapter. Possible reasons for the results will be considered as will limitations of this study and suggestions for future research.

CHAPTER VI

DISCUSSION

In this chapter discussion will focus on the results of the data analysis. Each of the research questions and their corresponding hypotheses will be addressed, the limitations of the research will be outlined, and suggestions for avenues of research that need further exploration will also be included.

Discussion of the Findings

The purpose of this study was to explore the problems that confront academics who are parents as they attempt to combine work and family roles. The model used to explore this issue related workload at home and on the job, satisfaction with workload at home and on the job, and role overload.

Research Question One

This question examined the patterns of job and domestic workload, job and domestic workload satisfaction and role overload for the entire sample, and possible gender differences in the distribution of these variables. The

frequency distributions for the domestic workload items clearly indicate that women bear the primary responsibility for the majority of these tasks. For each of the five domestic task areas, with the exception of responsibility for home maintenance tasks, women were more likely than men to report that they had sole responsibility. The gender differences in mean scores for all of the task areas were statistically significant and supply evidence for a gender division of labour in the home.

The evidence for gender differences in level of responsibility for domestic tasks and the pattern of division of responsibility across domestic tasks in this sample is consistent with the literature (Barnett & Baruch, 1987; Berk, 1985; Maret & Finlay, 1984) and suggests gender stereotyping of these responsibilities. However, the results also suggest that the women share responsibility for many of these tasks. Child care arrangements was the only task area for which more women reported sole responsibility than reported they shared responsibility. Men, on the other hand, were more likely to report that their spouses had responsibility for all household tasks, except personal care of family members and home maintenance. Since these results are not based on couple data, they suggest that the partners of the women in this sample may share responsibility for more tasks than do the men in the sample.

While these results indicate that women have a heavier domestic workload, it must be born in mind that the tasks specified in these questions are heavily weighted towards traditionally "feminine" tasks, and give little weight to tasks that men are more likely to perform. Thus it is not surprising that women have a high level of responsibility for these tasks. The results do suggest, however, that men continue to bear little responsibility for these "feminine" domestic tasks.

Furthermore, though the response categories give an estimate of the level of responsibility individuals bear in the specified task areas, the measure is not a good indicator of the amount of time or energy that is associated with meeting these responsibilities. There may be variation in the time and energy that is required to accomplish different tasks, and individuals may vary in the time they are willing or able to spend on different tasks. In addition, sharing of tasks does not necessarily imply an equal division of responsibility for any given task. The manner in which tasks are "shared" may vary from one couple to another and from task to task. All of these factors will influence the amount of time that an individual spends on a given set of tasks. Thus, while these results suggest that women have responsibility for more domestic tasks than men, it is not clear what time and energy demands are associated with these responsibilities.

In future research more specific measures of the amount of time that women and men spend in specific domestic tasks should be included with measures of responsibility. Also, measures of responsibility should ask for more specific information regarding the manner in which responsibilities are shared.

With regard to satisfaction with domestic workload, significant gender differences emerged on the scores for the total index and in the mean scores for satisfaction with responsibility for housekeeping. Women had lower mean satisfaction scores both on this task and on the index. This finding is consistent with the literature which suggests that "feminine" chores, such as cleaning and cooking, are the least desirable aspect of the domestic workload. Thus, "help" with these tasks has the greatest impact on women's satisfaction with domestic workload (Benin & Agostinelli, 1985; Ross et al., 1983).

Gender differences in preferences for domestic tasks were also suggested by the relationship between domestic workload and domestic workload satisfaction. Women are most likely to be satisfied with all domestic tasks when responsibility for them is shared. Men, however, appear to be more selective in the kinds of tasks for which they are willing to be responsible. The results suggest that men prefer their spouses to maintain responsibility for some

traditionally "feminine" tasks, such as child care and housekeeping. However, they do appear to be willing to share responsibility for other "feminine" tasks such as children's social activities and personal care of family members. In addition, men appear to prefer to maintain responsibility for the traditionally "male" tasks associated with home maintenance.

These findings suggest that there are gender differences in the underlying factors that influence satisfaction with the division of responsibility for domestic tasks. Women's preference for sharing of tasks may be a result of a desire to lessen their traditional domestic workload. Men appear to be selective in the kinds of tasks that they are willing to add to their domestic responsibilities. Men may prefer to maintain responsibility for traditionally "male" tasks because they are role expectations traditionally associated with the position of father-husband. The remaining tasks, however, may be seen as "add-ons" to their traditional taskload and therefore responsibility for them is chosen more selectively.

With regard to gender differences in relative job workload, men perceive themselves to have significantly higher levels of workload than women in the areas of research and graduate teaching. This finding fits with the literature which suggests that females are more likely to

have lighter graduate, as opposed to undergraduate teaching load, and are likely to spend less time in research than their male counterparts (Gmelch et al., 1986; Simeone, 1987). It remains unclear, however, what the reasons are for these differences.

Comparison of the mean scores on the items that make up the job workload satisfaction index suggests that these perceived differences in workload may not be a source of dissatisfaction. There were no significant gender differences on the mean satisfaction scores for research load or graduate teaching load. However, this conclusion is tentative at best. Correlations between specific job tasks and satisfaction with these tasks were not tested for, neither were gender comparisons made on these relationships. Further exploration of this issue should include a comparison of preferred and actual workload in each task area.

On average, for the entire sample, the job workload satisfaction scores on the index were below the index mid-point. This suggests that the academics in this sample are satisfied with their workload in fewer than half of the task areas specified. There were no significant gender differences in overall satisfaction with job workload. This is consistent with a similar finding (or lack of) for relative job workload.

Moderate scores on the role overload index were reported for the total sample. There were no gender differences on mean scores for the individual role overload items or for the index. This finding suggests that female academics are no more likely than their male counterparts to experience role overload. This is interesting in view of the fact that women perceive themselves to have an equal overall relative job workload, but clearly bear more responsibility for domestic tasks. Bearing in mind the problems with the measure of domestic workload already outlined, this finding offers some support to the argument that workload is not necessarily directly related to role overload. This issue will be pursued further in the discussion of the regression results. Attention will now turn to examination of those results.

Research Question Two

Research question two explored the relationships between the personal and family variables, job and domestic workload, domestic and job workload satisfaction, and role overload. The results will be examined as they relate to the hypotheses generated by this question.

Hypothesis Six

The regression equation for the domestic workload index explained a significant proportion of the variance.

However, gender of respondent was the only variable that had a significant relationship to domestic workload. This finding is not surprising in view of the nature of the measure of this variable, as discussed above. Age and number of children were not related to level of domestic responsibility. Again, the explanation for this finding (or lack of) may lie in the items that made up the index measure of the dependent variable itself. These questions asked who had responsibility for domestic tasks. A question asking about the amount of time spent in these tasks might be more sensitive to variations in time spent in domestic tasks which result from differences in the number and/or age of children.

In the regression for the job workload index, though the equation explained a significant proportion of the variance, only age of respondent was significantly related to the dependent variable. Older academics are more likely than younger academics are to perceive themselves to have a higher level of workload than their colleagues. Assuming that age is positively correlated with rank, this relationship may be a result of additional responsibilities associated with higher rank. It may also be a reflection of older academics' ability to take on a heavier job workload once their children have grown. Younger academics of both genders appear to have a lighter job workload. Because of the large proportion of women in the sample, this finding

may be a reflection of young women's workload more than that of young men. A more gender-balanced sample would make it possible to clarify this issue.

Hypotheses Seven and Eight

Hypotheses seven and eight explored the relationship between the personal and family variables, job and domestic workload, and job and domestic workload satisfaction. The results of the cross-tabulation of these three variables (as discussed above) suggest that there are gender differences in the factors influencing satisfaction with the division of labour. The results of the regression also suggest that, when the effects of gender are controlled for, level of domestic responsibility is negatively associated with satisfaction levels. Higher levels of domestic responsibility were associated with lower levels of satisfaction for both women and men. It would appear that both male and female respondents are more satisfied when they have sole responsibility for fewer domestic tasks.

The lack of significant relationships between the explanatory variables and job workload satisfaction may be the result of variables missing from the model. The work of Porter and Lawler (1968) suggests that there are factors which mediate the relationship between workload and satisfaction. Individuals' expectations for, and

perceptions of, the level of reward and recognition they receive may mediate the relationship between workload and satisfaction. Inclusion of these variables might help to elucidate the relationship between job workload and job workload satisfaction.

Hypothesis Nine

Hypothesis nine examined the relationships of the personal and family variables, job and domestic workload, and job and domestic workload satisfaction to role overload. The regression equation for role overload explained a significant proportion of the variance in this variable. Job workload, job workload satisfaction, and age of youngest child were all significantly related to role overload. Each of these variables will be discussed in turn.

Job workload was positively related to role overload. This suggests that, when the effects of the remaining variables are controlled for, as job-related workload increases the experience of role overload also increases. It is interesting that job workload is related to role overload, but domestic workload is not. This finding is consistent with the findings of Cooke and Rousseau (1984), which suggest that domestic work may have alleviating effects on stress levels. Cooke and Rousseau (1984) reported that job role expectations were related to

perceived work overload, but occupation of family roles was not. They speculated that the social support gained from cooperative family members might offset some of the negative effects that additional family responsibilities may have on stress levels. The fact that many of the women in this study reported that they shared responsibility for domestic tasks, may be an indication that they receive a high level of support from their family members. This support may, in turn, reduce the level of role overload that they experience.

The difficulties with the items used to measure domestic workload, as already outlined, might contribute to the lack of relationship of this variable to role overload. However, age of youngest child was significantly related to role overload. This variable may be a better indicator of the amount of time spent in domestic tasks associated with the care of children, than was the domestic responsibility measure. As children get older, the tasks associated with them may be less time consuming, since children may be more capable of performing some of these tasks themselves. Thus, role overload decreases as a result of the declining domestic workload of parents who have older children. The use more specific measures of the amount of time spent in domestic tasks might clarify this issue.

The research exploring the relationship between age of children and time spent by parents in child care supports this suggestion. Robinson (1977), Pleck (1983), and Coverman and Sheley (1986) reported that age of children was negatively correlated with time in child care among mothers and fathers. Berk (1985) also reported that the total time family members spent in domestic tasks decreased as children got older. These findings offer some support to the argument that increased domestic workload may be associated with higher levels of role overload.

The finding that higher levels of job workload satisfaction were associated with lower levels of role overload offers some support to the hypothesis that factors other than the amount of work performed influence the experience of role overload. Thus, satisfaction with the amount of work one has on the job may influence the degree to which resulting time demands are tolerated or perceived as interfering with the ability to perform adequately. However, level of workload appears to have a direct influence on role overload, independent of the effects of workload satisfaction. Further exploration of the relationship between job workload and job workload satisfaction among academics would help to clarify this issue.

Regression analyses can establish that variables are related, but it cannot address the issue of causality. The model explored in this study has, thus far, implied that role overload is influenced by individuals' perceptions of the demands of the situation and their affective response to these demands. It is possible that some of the effects proposed in this model also operate in the opposite direction from those specified: the experience of higher levels of role overload may influence perceptions of, or responses to, workload demands which in turn influences perceived role overload. Thus, the relationship between role overload and workload may be reciprocal.

The literature examining the coping strategies used by people under stress suggests that individuals adopt from a variety of strategies in order to redefine the demands of their situation to match their abilities (Hall, 1972). Thus, it is possible that the experience of role overload affects individuals' satisfaction with their workload and in turn brings about a adjustment in the workload they take on. Thus the women in this sample may not experience higher levels of role overload because they have already made the adjustments to their workload that were necessary to bring feelings of time pressure under control. Lowering of their research and graduate teaching loads and/or sharing of household tasks may have been among the strategies they have adopted. Longitudinal data is needed to explore this issue.

Limitations of the Study

The findings of this study are limited by certain methodological problems in addition to the problems with the measures of domestic workload and job workload satisfaction already described. The small sample size places limits on the reliability and generalizability of the results. Thus, these findings are applicable only to the population from which the sample was selected: academic staff at the University of Alberta. Caution must therefore be exercised in drawing conclusions about the accuracy of these results. A larger sample drawn from a wider population would increase the generalizability of these results.

Another methodological problem which relates to the size of the sample concerns the ratio of males to females. Because the focus of the original study was on the experiences of female academic staff, the sample was heavily weighted in favour of women. The present study attempted to compare gender groups on a number of the major variables, and gender was included as an independent variable in the regression equations. However, the small proportion of males in the sample means that the gender comparisons are tentative. The small number of men in the sample also means that men are proportionately underrepresented in the sample. This further reduces the reliability of the results as they relate to academic men.

Furthermore, the occupational composition of the sample also poses some problems with regard to the interpretation of these results. The sample was composed of four categories of academic staff. The work typical of these four groups varies considerably in nature, if not in amount. The demands of teaching, an important component of the workload of most faculty members, include preparing for and conducting classes, being accessible to students, and dealing with the administrative aspects of conducting courses. This workload may be quite different from the workload of a librarian, for example, both in the kinds of tasks involved and the time demands associated with them. These differences may have implications for the degree of role overload experienced. For example, it may be difficult to control the amount of time that students require for consultation. Thus it is not clear to which occupational group these results most accurately apply. To maintain sample size and to study the specified population, this mixed sample was retained. However, comparison of larger samples from each of these groups would clarify how these findings relate to each occupational grouping, as would more specific information regarding the nature of their workloads.

Summary

The primary purpose of this study was to explore possible gender differences in the effects of combining an academic career with family responsibilities. Modifications to the model explored in this study are presented in Figure 2.

In summary, the results of this investigation suggest that, while overall levels of role overload are not related to gender or age group, the sources of role overload may vary across the family life cycle. Age of youngest child was related to role overload. Assuming that there is a positive correlation between age of respondent and age of youngest child, domestic workload may be the source of role overload for younger academics. Job workload was correlated with both age of respondent and role overload. Thus, among older academics who no longer face the demands of raising young children, job workload may increase and become the source of role overload.

Gender was not found to be directly related to role overload. Though women reported higher levels of responsibility for domestic tasks, they reported no more role overload than their male counterparts. The women in this sample are more likely than their male counterparts to report that they share responsibility for domestic tasks.

Sharing these domestic responsibilities might be the strategy they adopt to reduce their levels of role overload. Alternatively, the women in this relatively high income group may be able to hire domestic help to actually perform domestic tasks. Thus, women's responsibility for these tasks may translate into responsibility for finding someone to do them, and does not amount to a large commitment of time.

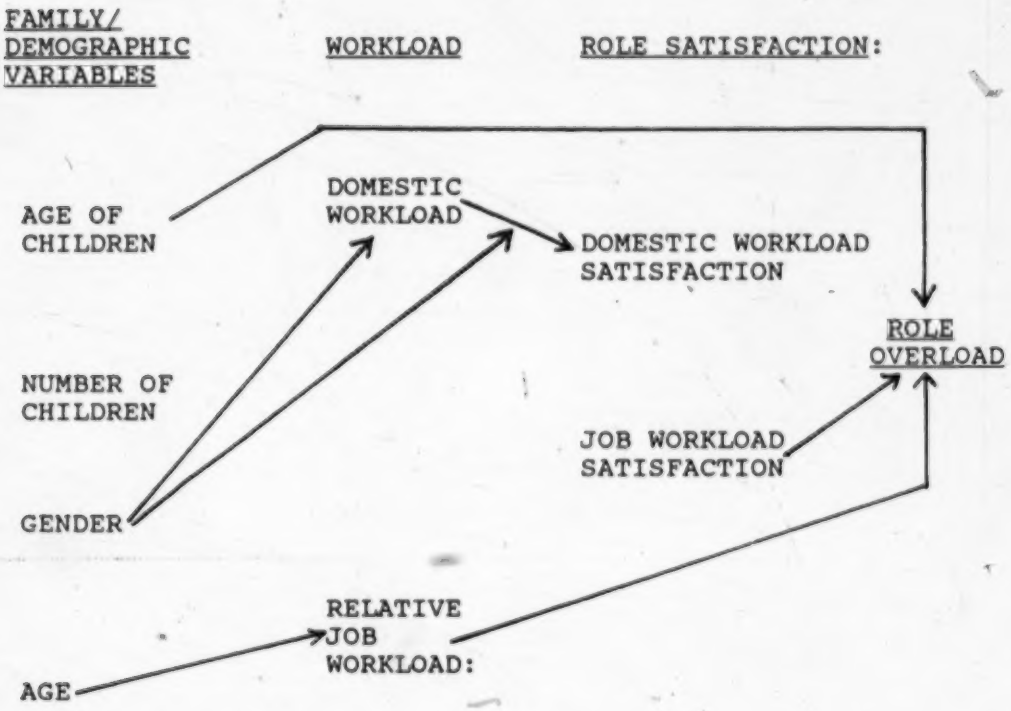

Figure 2. Significant relationships in the model of workload and role overload among academics, as revealed by the testing of the model.

An alternative explanation for lack of gender differences in reported levels of role overload has been put forth by Yogev (1982) for findings similar to these. Yogev

suggested that the faculty women in her study, who worked longer hours but reported less overload than their colleagues, were reluctant to admit that they could not cope with the demands of combining career and family. She suggested that their ideals for professional women were such that to admit they were overworked would be an admission of failure.

Traditional gender roles might also influence women's apparent unwillingness to admit they cannot handle their double burden. Lein (1984) has suggested that guilt for working outside the home might be a factor restraining these women from admitting that they are experiencing difficulty in combining work and family roles.

No gender differences were reported in overall levels of relative job workload or job workload satisfaction. Though gender differences emerged in job workload for specific tasks (men reported heavier research and graduate teaching loads) these differences did not appear to be associated with differences in satisfaction with workload in these two task areas. This evidence is weak however, and it is unclear how these differences in workload emerge or how people feel about their workload.

Both relative job workload and job workload satisfaction were related to role overload. These findings

suggest that both of these aspects of the job-related work of academics have a potential impact on the degree to which time pressures are perceived to interfere with the ability to perform adequately. The finding that age of youngest child is related to role overload also suggests that aspects of the domestic workload influence perceptions of time pressures as interfering with abilities to perform adequately. What is not clear is why, when women appear to bear responsibility for the majority of child-related tasks, their levels of role overload are not higher than those of their male counterparts. The evidence of multicollinearity among the explanatory variables in the equation for domestic workload satisfaction suggests that this issue may be a complicated one. More in-depth examinations of the experiences and coping strategies of academics who are parents are needed to explore this issue.

The results of a closer examination of this issue may have implications for the criteria by which faculty, in particular, are considered for advancement. If research is to continue as the primary indicator of productivity for this group (Menges & Exum, 1983), women's reported lower level of work in this area may be a factor inhibiting their advancement. The fact that age is positively related to job workload, that women have less graduate teaching and research loads, and that women also have a heavier domestic workload suggests that young women may adjust to pressures

of combining work and with raising a family by cutting back on some of their job-related tasks. However, there were no gender differences in overall job workload, and age was positively related to relative job workload for both groups. It is unclear, then, why young male academics also perceive themselves to have a lighter job workload. It is also unclear why there are no gender differences in levels of role overload.

Furthermore, as women continue to participate in the workforce, the chance that the wives of future male faculty will be employed will also increase. Resulting pressures for these men to participate more fully in domestic tasks may also have implications for their ability to compete. To the extent that the domestic workload of academic males becomes more similar to that of females, they may also be less able to undertake the research load that will ensure them advancement in the academic community.

REFERENCES

Aisenberg, N. & Harrington, M. (1988). Women of academe: Outsiders in the sacred grove. Amherst: University of Massachusetts.

Anderson, A.B., Basilevsky, A., & Hum, D.P.J. (1983). Missing data: A review of the literature. In P.H. Rossi, J.D. Wright, & A.B. Anderson (Eds.), Handbook of survey research (pp. 415-494). Toronto: Academic.

Aneschensel, C.S., Fredrichs, R.R., & Clark, V.A. (1981). Family roles and sex differences in depression. Journal of Health and Social Behavior, 22, 379-393.

Astin, H.S. (1973). Career profiles of women doctorates. In A. Rossi & A. Calderwood (Eds.), Academic women on the move, (pp. 139-161). New York: Russell-Sage Foundation.

Astin, H.S. & Snyder, M.B. (1982). A decade of response. Change, 14, 26-31, 59.

Barnett, R.C. & Baruch, G.K. (1985). Women's involvement in multiple roles and psychological distress. Journal of Personality and Social Psychology, 49, 135-145.

Barnett, R.C. & Baruch, G.K. (1987). Determinants of fathers' participation in family work. Journal of Marriage and the Family, 49, 29-41.

Baruch, G.K., & Barnett, R.C. (1986). Role quality, multiple role invovlement and pshchological well-being in midlife women. Journal of Personality and Social Psychology, 51, 578-585.

Benin, M.H. & Agostinelli, J. (1988). Husband's and wives' satisfaction with the division of labour. Journal of Marriage and the Family, 50, 349-361.

Berardo, D.H., Shehan, C.L., & Leslie, G.R. (1987). A residue of tradition:Jobs, careers, and spouses' time in housework. Journal of Marriage and the Family, 49, 381-390.

Berheide, C.W., Berk, S.F., & Berk, R.A. (1976). Household work in the suburbs: The job and its participants. Pacific Sociological Review, 19(4), 491-517.

Berk, R.A. & Berk, S.F. (1979). Labor and leisure at home: Content and organization of the household day. Beverly Hills: Sage.

Berk, S. (1985). The gender factory. New York: Plenum.

Biddle, B.J. (1979). Role theory: Expectations, identities, and behaviors. New York: Academic Press.

Bird, G.W., Bird, G.A., & Scruggs, M. (1984). Determinants of family task sharing: A study of husbands and wives. Journal of Marriage and the Family, 46, 345-355.

Bohen, H.H., & Viveros-Long, A. (1981). Balancing jobs and family life: Do flexible work schedules help?. Philadelphia PA: Temple.

Burr, W.R., Leigh, G.K., Day, R.D., & Constantine, J. (1979). Symbolic interaction and the family. In W.R. Burr, R. Hill, F.I. Nye, & I.L. Reiss (Eds.), Contemporary Theories About the Family: General Theories/Theoretical Orientations, Vol. 2, (pp. 42-111). New York: Free Press.

Carnegie Foundation for the Advancement of Teaching. (1986, March-April). The satisfied faculty. Change, 31-34.

Cooke, R.A., & Rousseau, D.M. (1984). Stress and strain from family roles and work-role expectations. Journal of Applied Psychology, 69(2), 252-260.

Coverman, S., & Sheley, J.F. (1986). Changes in men's housework and child-care time, 1965-1975. Journal of Marriage and the Family, 48, 413-422.

DeSole, G. & Hoffman, L. (1981). Rocking the boat: Academic women and the academic process.New York: Modern Language Association

Equity Office. (1990). Male and female breakdown by title. Edmonton: University of Alberta, Equity Office.

Ferber, M.A., & Loeb, J.W. (1973) Performance, rewards, and perceptions of sex discrimination among male and female faculty. American Journal of Sociology, 78, 995-1002.

Feree, M.M. (1984). Class, housework, and happiness: Women's work and life satisfaction. Sex Roles, 11, 1057-1074.

Friedan, B. (1981). The second stage. New York: Summit.

Gmelch, W.H., Lovrich, N.P., & Wilke, P.K. (1984). Sources of stress in academe: A national perspective. Research in Higher Education, 20(4), 477-490.

Gmelch, W.H., Wilke, P.K., & Lovrich, N.P. (1986). Dimensions of stress among university faculty: Factor-analytic results from a national study. Research in Higher Education, 24(3), 266-286).

Goode, W.J. (1960). A theory of role strain. American Sociological Review, 25, 483-496.

Gore, S, & Mangione, T.W. (1983). Social roles, sex roles and psychological distress: Additive and interactive models of sex differences. Journal of Health and Social Behavior, 24, 300-312.

Gove, W.R. & Geerken, M.R. (1977). The effect of children and employment on the mental health of married men and women. Social Forces, 56, 66-76.

Hall, D.T.A. (1972). A model of coping with role conflict: The role behavior of college educated women. Administrative Science Quarterly, 17, 471-486.

Hardesty, C. & Bokemeier, J. (1989). Finding time and making do: Distribution of household labor in nonmetropolitan marriages. Journal of Marriage and the Family, 51, 253-267.

Harris, B.J. (1978). Beyond her sphere: Women and the professions in American history. Westport, CT:Greenwood.

Haw, M.A. (1982). Women, work, and stress: A review and agenda for the future. Journal of Health and Social Behavior, 23(2), 132-144.

Hawkins, A. & Rovine, M. (1988, November). Some measurement issues in the study of job-family role strain. Paper presented at the National Conference on Family Relations, Philadelphia.

Hill, R., & Hansen, D. A. (1960). The identification of conceptual frameworks utilized in family study. Journal of Marriage and Family Living, 12, 299-311.

Hill, R. (Ed.). (1970). Family development in three generations: A longitudinal study of changing family patterns of planning and achievement. Cambridge, MA: Schenkman.

Jamieson, S.I., & Kieren, D.K. (1990). Work climate survey: Percpetions of female members of the Association of the Academic Staff of the University of Alberta related to collegiality, job satisfaction, and productivity. Edmonton: Women's Issues Committee of the Association of the Academic Staff of the University of Alberta.

Kandel, D.B., Davies, M., & Raveis, V.H. (1985). The stressfulness of daily social roles for women: Marital, occupational, and household roles. Journal of Health and Social Behavior, 26 (March), 64-78.

Kerlinger, F.N. (1986). Foundations of behavioral research (3rd ed.). New York: Holt, Rinehart, & Winston.

Lein, L. (1984). Families without villains: American families in an era of change. Toronto: Lexington

Lewis, S.N.C., & Cooper, C.L. (1987). Stress in two-earner couples and stage in the life cycle. Journal of Occupational Psychology, 60, 289-303.

Long, J. & Porter, K.L. (1984). Multiple roles of midlife women: A case for new directions in theory, research, and policy. In G. Baruch & J. Brooks-Gunn (Eds.), Women in midlife (pp.109-159). New York: Plenum.

Lovell-Troy, L.A. (1983). Anomia among employed wives and housewives: An exploratory analysis. Journal of Marriage and the Family, 45, 301-309.

Maret, E. & Finlay, B. (1984). The division of household labor among women in dual-earner families. Journal of Marriage and the Family, 46, 357-364.

Marks, S.R. (1977). Multiple roles and role strain: Some notes on human energy, time, and commitment. American Sociological Review, 42, 921-926.

Matthaei, J.A. (1982). An economic history of women in America: Women's work, the sexual division of labor, and the development of capitalism. New York: Schocken.

Menges, R.J., & Exum, W.H. (1983) Barriers to the advancment of women and minority faculty. Journal of Higher Education, 54 (2), 123-144.

Moos, R.H. (1986). Work as a human context. In J. R. Hackman, L.W. Hoffman, R.H. Moos, S.H. Osipow, & Tornatzky (Eds.), Psychology and work: Productivity, change, and employment (pp. 9-52). Washington DC: American Psychological Association.

Northcott, H.C. (1981). Women, work, health, and happiness. International Journal of Women's Studies, 4, 268-276.

Nyquist, L., Slivken, K. Spence, J.T., & Helmreich, R.L. (1985). Household responsibilities in middle-class couples: The contribution of demographic and personality variables. Sex Roles, 12(1/2), 15-33.

Oakley, A. (1974). The sociology of housework. Bath: Martin Robertson.

Parry, G. & Warr, P. (1980). The measurement of mothers' work attitudes. Journal of Occupational Psychology, 53, 245-252.

Pietromonaco, P.R., Manis, J., & Frohardt-Lane, K. (1986). Psychological consequences of multiple social roles. Psychology of Women Quarterly, 10, 373-382.

Pleck, J.H. (1983). Husbands' paid work and family roles: Current research issues. Research in the Interweave of Social Roles: Jobs and Families, 3, 251-333.

Pleck, J. (1985). Working wives/working husbands.Beverly Hills: Sage.

Porter, L.W., & Lawler, E.E. (1968). Managerial attitudes and performance. Homewood IL: Richard D. Irwin

Post, R.D. (1981). Causal explanations of male and female academic performance as a function of sex role biases. Sex Roles, 7, 691-698.

Radloff, L. (1975). Sex differences in depression: The effects of occupation and marital status. Sex Roles, 1, 249-265.

Robinson, J. (1977). How Americans use time. New York: Praeger.

Ross, C.E., Mirowsky, T., & Huber, J. (1983). Dividing work, sharing work, and in-between: Marriage patterns and depression. American Sociological Review, 48, 809-823.

Sandler, B.R. (1986). The campus climate revisited: Chilly for women faculty, administrators and graduate students. Washington, DC: Association of American Colleges.

Shehan, C.L. (1984) Wives' work and psychological well-being: An extension of Gore's social role hypothesis. Sex Roles, 11, 881-899.

Sieber, S.D. (1974). Toward a theory of role accumulation. American Sociological Review, 39, 567-578.

Simeone, A. (1987). Academic women: Working towards equality. South Hadley MA: Bergin and Garvey.

Smith, P.C., Kendall, L.M., & Hulin, C.L. (1969). The measurement of satisfaction in work and retirement: A strategy for the study of attitudes. Chicago IL; Rand McNally.

Spitze, G. (1988). Women's employment and family relations: A review. Journal of Marriage and the Family, 50, 595-618.

Studenmund, A.H. & Cassidy, H.J. (1987). Using econometrics: A practical guide. Toronto: Little, Brown

Statistics Canada. (1985). Women in Canada: A statistical report. Ottawa: Minister of Supply and Services

Statistics Canada. (1987). Teachers in universities: 1985-86. Ottawa: Minister of Supply and Services

Theodore, A. (1986). The campus troublemakers: Academic woman in protest. Houston TX: Cap and Gown.

Thoits, P. (1987). Negotiating roles. In F.J. Crosby (Ed.), Spouse, parent worker: On gender and multiple roles (pp. 11-22). New Haven NJ: Yale.

Timmons, B. (1989). Career progress and satisfaction among Canadian academics. Alberta Journal of Educational Research, 35(4) 325-336.

Tilly, L.A. & Scott, J.W. (1978). Women, work, and family. New York: Holt, Rinehart, and Winston.

University of Alberta. (1983a). The University of Alberta Board-AASUA Agreement: The APO agreement. Edmonton: University of Alberta.

University of Alberta. (1983b). The University of Alberta Board-AASUA Agreement: The FSO agreement. Edmonton: University of Alberta.

University of Alberta. (1983c). The University of Alberta Board-AASUA Agreement: The Librarian agreement. Edmonton: University of Alberta.

University of Alberta. (1988). The University of Alberta: The Faculty agreement. Edmonton: University of Alberta.

Welch, S. & Booth, A. (1977). Employment and health among married women with children. Sex Roles, 3, 385-397.

Wiley, D.L. (1987). The relationship between work/nonwork role conflict and job-related outcomes: Some unanticipated findings. Journal of Management, 13(3), 467-472.

Wright, J.D. (1978). Are working women really more satisfied? Evidence from several national surveys. Journal of Marriage and the Family, 40, 301-313.

Yoder, J.D. (1985). An academic woman as a token. Journal of Social Issues, 41(4), 61-72.

Yogev, S. (1981). Do professional women have egalitarian relationships? Journal of Marriage and the Family, 43, 865-871.

Yogev, S. (1982). Are professional women overworked?: Objective versus subjective perceptions of role loads. Journal of Occupational Psychology, 55, 165-169.

Yogev, S. & Brett, J. (1985). Perceptions of the division of housework and child care and marital satisfaction. Journal of Marriage and the Family, 47, 609-618.

APPENDIX A

AAS:UA Academic Climate Survey

We would be grateful if you, as a male member of staff, would supply information regarding your perceptions of the academic work environment at the University of Alberta.

Please indicate your responses by checking the most appropriate space(s).

A. Educational and Employment History

We would like to get an idea of the variations in education and employment histories that exist among academics.

1. Please indicate the highest level of education you have attained:
   - ☐ Bachelor's degree
   - ☐ Master's degree
   - ☐ Doctoral degree
   - ☐ other (specify) _____

2. In what year did you obtain this level? 19___

3. During any of the above programs, did you interrupt your study?
   - ☐ yes ☐ no

   If yes, for what reason(s) and for how long?
   - ☐ marriage _____ years
   - ☐ parenthood _____
   - ☐ illness _____
   - ☐ travel _____
   - ☐ employment _____
   - ☐ other (specify) _____

4. Have you taken any time away from the work force since you began working?
   - ☐ yes ☐ no

   If yes, for what reason(s) and for how long?
   - ☐ marriage _____ years
   - ☐ parenthood _____
   - ☐ illness _____
   - ☐ travel _____
   - ☐ education _____
   - ☐ other (specify) _____

5. Since attaining your highest level of education, have you changed your place of employment?
   - ☐ yes ☐ no

   If yes, for what reason(s)?
   - ☐ better paying job
   - ☐ relocation of spouse
   - ☐ more relevant or meaningful job
   - ☐ less demanding job
   - ☐ other (specify)

6. Please list, beginning with the most significant, three barriers which you faced in attempting to attain your career goals.

   1) _____
   2) _____
   3) _____

7. Do any of these continue to be barriers?
   - ☐ yes ☐ no

   If yes, which ones? (check appropriate)
   - ☐ 1) ☐ 2) ☐ 3)

8. Present employment status:
   - ☐ employed full time
   - ☐ employed part time
   - ☐ other (please specify) _____

9a. Please identify your position:
   - ☐ Faculty ☐ APO
   - ☐ FSO ☐ Librarian

9b. Please tell us your progress through the ranks at the U of A

	Year	Rank/Classification
First Appointment	19___	_____
	19___	_____
	19___	_____
	19___	_____
	19___	_____

10. How satisfied are you with the professional rank you currently hold?
   - ☐ very dissatisfied ☐ dissatisfied
   - ☐ neutral ☐ satisfied
   - ☐ very satisfied

   Why? _____

11. In the course of our lives each of us has encountered people and situations that have been important to our career aspirations and development. For each item in the following list please indicate the degree of influence that each has had on your career:

	Highly Negative Influence	Negative Influence	No Influence	Positive Influence	Highly Positive Influence
Mother	☐	☐	☐	☐	☐
Father	☐	☐	☐	☐	☐
Siblings	☐	☐	☐	☐	☐
Grandparents	☐	☐	☐	☐	☐
Spouse/Partner	☐	☐	☐	☐	☐
Children	☐	☐	☐	☐	☐
Friends	☐	☐	☐	☐	☐
School teachers	☐	☐	☐	☐	☐
School counsellors	☐	☐	☐	☐	☐
Professors/instructors/coaches	☐	☐	☐	☐	☐
Colleagues	☐	☐	☐	☐	☐
Availability of funds/scholarships	☐	☐	☐	☐	☐
Parents' socioeconomic status	☐	☐	☐	☐	☐
Family connections	☐	☐	☐	☐	☐
Your own personal beliefs	☐	☐	☐	☐	☐
Success in high school	☐	☐	☐	☐	☐
Success in postsecondary institution	☐	☐	☐	☐	☐
Proximity of educational institutions/ training facilities	☐	☐	☐	☐	☐
Proximity of employment opportunities	☐	☐	☐	☐	☐
Proximity of spouse's employment location	☐	☐	☐	☐	☐
Availability of child care	☐	☐	☐	☐	☐
Flexibility of time schedules at work	☐	☐	☐	☐	☐
Flexibility of time schedules at school	☐	☐	☐	☐	☐
Your own personality	☐	☐	☐	☐	☐
Being female/male	☐	☐	☐	☐	☐
Stereotypical attitudes of others	☐	☐	☐	☐	☐
Work experience/activities	☐	☐	☐	☐	☐

Other (specify) _____

12. Indicate if your appointment is:
☐ Probationary ☐ Continuing

13. If continuing, in what year did you receive the appointment? 19____.

14. In order of priority, list your top three career goals.
1) _____
2) _____
3) _____

15. Is your current level of advancement consistent with your career goals?
☐ yes ☐ no

16. It is likely that the U of A will offer me the opportunities to reach my career goals.
☐ strongly disagree
☐ disagree
☐ neutral
☐ agree
☐ strongly agree

B. General Work Environment

Turning to your current situation, please tell us about some general aspects of the work environment at the U of A.

17. It is important that the U of A make available day care for children of university staff.
☐ strongly disagree
☐ disagree
☐ neutral
☐ agree
☐ strongly agree

18. How adequate is the amount of day care which is available on campus for academic staff?
☐ very inadequate
☐ inadequate
☐ no opinion
☐ adequate
☐ more than adequate

19. How do you rate the quality of the available day care on campus?
☐ poor quality ☐ fair quality
☐ no opinion ☐ good quality
☐ superior quality

20. How many people are there in your immediate work environment? (Include all persons)
_____

21. Relative to other staff of a similar rank in your department, how would you describe the availability of support services you have access to in each of the following areas?

	Much less	Less	Equal	Much more	Unable to assess	N/A
Clerical services	☐	☐	☐	☐	☐	☐
Research assistants	☐	☐	☐	☐	☐	☐
Teaching assistants	☐	☐	☐	☐	☐	☐
Laboratory facilities	☐	☐	☐	☐	☐	☐
Computer time/funds	☐	☐	☐	☐	☐	☐
Administrative assistance	☐	☐	☐	☐	☐	☐

22. On average, compared with other related departments, how would you describe the availability of support services in your department?

	Much less	Less	Equal	Much more	Unable to assess	N/A
Clerical services	☐	☐	☐	☐	☐	☐
Research assistants	☐	☐	☐	☐	☐	☐
Teaching assistants	☐	☐	☐	☐	☐	☐
Laboratory facilities	☐	☐	☐	☐	☐	☐
Computer time/funds	☐	☐	☐	☐	☐	☐
Administrative assistance	☐	☐	☐	☐	☐	☐

23. When a decision is to be made in my department that affects me, I am likely to be consulted.
☐ strongly disagree
☐ disagree
☐ neutral
☐ agree
☐ strongly agree

24. Overall, how satisfied are you with your job?
☐ very dissatisfied
☐ dissatisfied
☐ neutral
☐ satisfied
☐ very satisfied
Why? _____
_____
_____

C. Work Load and Recognition

We would like some information regarding the work you do and the recognition you receive for it.

25. On average, compared with other staff members of equivalent rank in my department, (check one each)

	Much heavier	Heavier	Equal	Lighter	Much lighter	N/A
My total workload is	☐	☐	☐	☐	☐	☐
My research load is	☐	☐	☐	☐	☐	☐
My university committee load is	☐	☐	☐	☐	☐	☐
My faculty/unit committee load is	☐	☐	☐	☐	☐	☐
My department committee load is	☐	☐	☐	☐	☐	☐
My administrative load (excluding committee work) is	☐	☐	☐	☐	☐	☐
My professional service load is	☐	☐	☐	☐	☐	☐
My community service load is	☐	☐	☐	☐	☐	☐
Course instruction load:						
- undergraduate	☐	☐	☐	☐	☐	☐
- graduate	☐	☐	☐	☐	☐	☐

26. Please indicate the level of satisfaction you feel with the following elements of your work load.

	Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	N/A
Total workload	☐	☐	☐	☐	☐	☐
Research load	☐	☐	☐	☐	☐	☐
Committee responsibility load	☐	☐	☐	☐	☐	☐
Administrative duty load	☐	☐	☐	☐	☐	☐
Professional service load	☐	☐	☐	☐	☐	☐
Community service load	☐	☐	☐	☐	☐	☐
Course instruction load:						
- undergraduate	☐	☐	☐	☐	☐	☐
- graduate	☐	☐	☐	☐	☐	☐
Graduate advisory load	☐	☐	☐	☐	☐	☐

27. In terms of their importance to you, how would you describe the following forms of recognition for your work?

	Very low importance	Low importance	Neutral	High importance	Very high importance
Rewards of the work for its own sake	☐	☐	☐	☐	☐
Promotion to a higher rank	☐	☐	☐	☐	☐
Attaining administrative responsibilities	☐	☐	☐	☐	☐
Committee appointments	☐	☐	☐	☐	☐
Rewards for achievements	☐	☐	☐	☐	☐
Monetary rewards	☐	☐	☐	☐	☐
Approval of others	☐	☐	☐	☐	☐

28. In general, how would you describe the basis on which recognition is granted to academic staff at the U of A?

- ☐ Merit is always the primary consideration
- ☐ Merit is sometimes the primary consideration
- ☐ Merit is rarely the primary consideration
- ☐ Don't know

29. What is your opinion about the relationship between an employee's gender and the work required to gain recognition at the U of A?

- ☐ Women have to do more/better work than men to achieve equal recognition
- ☐ Men have to do more/better work than women to achieve equal recognition
- ☐ Men and women achieve approximately equal recognition for equal work

30. Overall, how would you describe the relationship between your accomplishments and the level of recognition you have received at the U of A?

- ☐ The level of recognition I have received is more than I expected
- ☐ The level of recognition I have received is what I expected
- ☐ The level of recognition I have received is less than I expected

31. For the most part, how satisfied are you with the level of recognition you have received at the U of A for your professional achievements?

- ☐ highly dissatisfied
- ☐ dissatisfied
- ☐ neutral
- ☐ satisfied
- ☐ highly satisfied

---

32. Considering the level of recognition you have received for your work, how does it compare with that received by colleagues of each gender who are at a similar stage in their careers and whose work is comparable to your own?

Compared with *female* colleagues:

- ☐ much lower
- ☐ lower
- ☐ equivalent
- ☐ high
- ☐ much higher

Compared with *male* colleagues:

- ☐ much lower
- ☐ lower
- ☐ equivalent
- ☐ higher
- ☐ much higher

---

33. As sources of personal satisfaction, how do satisfactions obtained in the following areas of your life compare in importance with the satisfaction of promotion? (check one each)

	Far less important	Less important	Equally important	More important	Far more important
Relationship with spouse or partner	☐	☐	☐	☐	☐
Parental role	☐	☐	☐	☐	☐
Other family involvements	☐	☐	☐	☐	☐
Hobbies and pastimes	☐	☐	☐	☐	☐
Friendships	☐	☐	☐	☐	☐

34. My chair/supervisor provides feedback concerning my work and my decisions.
- ☐ never
- ☐ rarely
- ☐ sometimes
- ☐ usually
- ☐ always

35. My chair/supervisor encourages my professional growth.
- ☐ never
- ☐ rarely
- ☐ sometimes
- ☐ usually
- ☐ always

D. Committee Work

Turning now to committee work, we need some information regarding your perceptions of committees at the U of A.

36. On the average in the committees I have served on, males and females are proportionately represented.
- ☐ strongly disagree
- ☐ disagree
- ☐ neutral
- ☐ agree
- ☐ strongly agree

If you disagreed, would you say that
- ☐ men are underrepresented
- ☐ women are underrepresented

37. What is your impression of the relationship between the gender composition and the relative influence of committees at the university? (check one)
- ☐ The more influential the committee, the higher the proportion of women on it
- ☐ The more influential the committee, the higher the proportion of men on it
- ☐ The level of influence of the committee bears no relationship to gender composition
- ☐ Too little experience to describe

38. Which of the following phrases most closely describes your impression of the guiding principle for committee assignments in your department? (check one)
- ☐ Competence of appointees
- ☐ Power/influence of appointees
- ☐ Proportionate gender representation
- ☐ Gender—without reference to proportionate representation
- ☐ Too little experience to describe
- ☐ Other (please specify) _____

39. Compared with other members, how frequent are your opportunities to make contributions at the average committee meeting?
- ☐ less frequent than the average
- ☐ about as frequent as the average
- ☐ more frequent than the average

40. On average, when you make contributions during committee meetings, how frequently are they directly acknowledged by other members?
- ☐ never
- ☐ rarely
- ☐ sometimes
- ☐ usually
- ☐ always

E. Social Environment

We would like to know what your perceptions are of the social setting at the U of A.

41. Approximately how often would you say informal mixed-gender socializing occurs in your department?
- ☐ never
- ☐ once a year
- ☐ every six months
- ☐ once a month
- ☐ every two weeks
- ☐ once a week
- ☐ every day

42. When informal socializing occurs after working hours among members of your department, how often do you feel welcome to participate?
- ☐ never
- ☐ rarely
- ☐ sometimes
- ☐ usually
- ☐ always

43. How often do you participate in these informal social opportunities?
- ☐ never
- ☐ rarely
- ☐ sometimes
- ☐ usually
- ☐ always

44. Please read each of the following statements and indicate how much support you receive from each of the sources listed.

1) *I have a feeling of being loved or cared about from:*	No	Yes	Yes a Lot
My spouse or partner	☐	☐	☐
My children	☐	☐	☐
Other relatives	☐	☐	☐
Close friends	☐	☐	☐
Co-workers	☐	☐	☐
Religious groups	☐	☐	☐
My spiritual faith	☐	☐	☐
Community or neighborhood groups	☐	☐	☐
Professionals or Service Providers	☐	☐	☐
Special groups I belong to	☐	☐	☐
Reading certain books or watching TV	☐	☐	☐
Other: _____			

2) *I feel I am valued or respected for who I am and what I can do by:*	No	Yes	Yes a Lot
My spouse or partner	☐	☐	☐
My children	☐	☐	☐
Other relatives	☐	☐	☐
Close friends	☐	☐	☐
Co-workers	☐	☐	☐
Religious groups	☐	☐	☐
My spiritual faith	☐	☐	☐
Community or neighborhood groups	☐	☐	☐
Professionals or Service Providers	☐	☐	☐
Special groups I belong to	☐	☐	☐
Reading certain books or watching TV	☐	☐	☐
Other: _____			

3) *I have a sense of trust or security from the "give-and-take" of being involved with:*	No	Yes	Yes a Lot
My spouse or partner	☐	☐	☐
My children	☐	☐	☐
Other relatives	☐	☐	☐
Close friends	☐	☐	☐
Co-workers	☐	☐	☐
Religious groups	☐	☐	☐
People who share my beliefs and values	☐	☐	☐
Community or neighborhood groups	☐	☐	☐
Professionals or Service Providers	☐	☐	☐
Special groups I belong to	☐	☐	☐
Ideas I get from books, TV, etc.	☐	☐	☐
Other: _____			

4) *When I need to talk or think about how I'm doing with my life, I feel understood and get help from:*	No	Yes	Yes a Lot
My spouse or partner	☐	☐	☐
My children	☐	☐	☐
Other relatives	☐	☐	☐
Close friends	☐	☐	☐
Co-workers	☐	☐	☐
Religious groups	☐	☐	☐
Co groups	☐	☐	☐
Community or neighborhood groups	☐	☐	☐
Professionals or Service Providers	☐	☐	☐
Special groups I belong to	☐	☐	☐
Reading certain books or watching TV	☐	☐	☐
Other: _____			

5) *I feel good about myself when I am able to do things for and help:*	No	Yes	Yes a Lot
My spouse or partner	☐	☐	☐
My children	☐	☐	☐
Other relatives	☐	☐	☐
Close friends	☐	☐	☐
Co-workers	☐	☐	☐
Religious groups	☐	☐	☐
People who share my beliefs and values	☐	☐	☐
Community or neighborhood groups	☐	☐	☐
Professionals or Service Providers	☐	☐	☐
Special groups I belong to	☐	☐	☐
Causes that are promoted in books or on TV	☐	☐	☐
Other: _____			

45. Please provide information regarding your work load and the effect it has on you.

1) *I feel I have more to do than I can handle comfortably*

☐ always ☐ most of the time
☐ some of the time ☐ rarely
☐ never ☐ N/A

2) *I wish I had more time to do things for the family*

☐ always ☐ most of the time
☐ some of the time ☐ rarely
☐ never ☐ N/A

3) *I feel physically drained when I get home from work*

☐ always ☐ most of the time
☐ some of the time ☐ rarely
☐ never ☐ N/A

4) *I feel I have to rush to get everything done each day*

☐ always ☐ most of the time
☐ some of the time ☐ rarely
☐ never ☐ N/A

5) *I feel I don't have enough time for myself*

☐ always ☐ most of the time
☐ some of the time ☐ rarely
☐ never ☐ N/A

6) *I feel emotionally drained when I get home from work*

☐ always ☐ most of the time
☐ some of the time ☐ rarely
☐ never ☐ N/A

46. It has been suggested that certain forms of social behavior are inappropriate in professional settings and serve to undermine professional standing.

In a professional setting, have you ever been made to feel uncomfortable by someone else's reference to your

marital status?
☐ frequently
☐ occasionally
☐ rarely
☐ at least once
☐ never

appearance?
☐ frequently
☐ occasionally
☐ rarely
☐ at least once
☐ never

gender orientation?
☐ frequently
☐ occasionally
☐ rarely
☐ at least once
☐ never

family responsibilities?
☐ frequently
☐ occasionally
☐ rarely
☐ at least once
☐ never

age?
☐ frequently
☐ occasionally
☐ rarely
☐ at least once
☐ never

Please answer the following questions about sexual harassment based on your own understanding of the term.

47. How common do you think incidents of sexual harassment are among academic staff at the U of A?
☐ it happens frequently
☐ it happens occasionally
☐ it happens rarely
☐ I've known/heard of it happening at least once
☐ it never happens

48. Indicate your level of personal anxiety about being sexually harassed at the U of A?
☐ very high concern
☐ high concern
☐ moderate concern
☐ low concern
☐ no concern

49. Have you ever experienced sexual harassment from co-workers?
☐ yes ☐ no

F. Demographic Information

Please indicate your:

50. Age at last birthday
☐ 25 - 35 years ☐ 36 - 45 years
☐ 46 - 55 years ☐ 56 - 65 years
☐ 66 - 75 years

51. Marital status
☐ single
☐ married, cohabiting
☐ married, not cohabiting
☐ not married, cohabiting
☐ separated
☐ divorced
☐ widowed
☐ other (please specify) _____

52. Do you have any children living with you?

☐ yes ☐ no

If yes, please indicate their ages _____

53. Do you have a child care arrangement (e.g., daycare, after school care, babysitter)?

☐ yes ☐ no

If yes, indicate the type _____

54. Who in your household has *primary* responsibility for the following tasks?

	Partner/ spouse	Self	Shared Equally
Child care arrangements	☐	☐	☐
Social activities of children	☐	☐	☐
Regular housekeeping	☐	☐	☐
Home maintenance	☐	☐	☐
Personal care of family members	☐	☐	☐

56. How satisfied are you with the level of responsibility you have for the following tasks in the home?

Child care arrangements
☐ highly satisfied ☐ satisfied
☐ neutral ☐ dissatisfied
☐ highly dissatisfied

Social activities of children
☐ highly satisfied ☐ satisfied
☐ neutral ☐ dissatisfied
highly dissatisfied

Regular housekeeping
☐ highly satisfied ☐ satisfied
☐ neutral ☐ dissatisfied
☐ highly dissatisfied

Home maintenance
☐ highly satisfied ☐ satisfied
☐ neutral ☐ dissatisfied
highly dissatisfied

Personal care of family members
☐ highly satisfied ☐ satisfied
☐ neutral ☐ dissatisfied
☐ highly dissatisfied

Thank you for your assistance.

If you are willing to participate in a follow-up interview, please contact the AAS:UA at 5321 between the hours of 8:30 a.m. - 4:00 p.m.

Is there an incident or anecdote you would like to share that typifies your experience of the work environment at the U of A?

APPENDIX B

Results of the factor analysis of the items included in the role overload scale.

Principle components analysis

Variables in the analysis:

1) I feel I have more to do than I can handle
2) I feel physically drained when I get home from work
3) I feel I have to rush to get everything done each day
4) I feel I don't have enough time for myself
5) I feel emotionally drained when I get home from work
6) I wish I had more time to do things for the family

Factor Matrix

Variable Number	Factor 1
1	.696
2	.772
3	.834
4	.718
5	.744
6	.763

Final statistics:

Variable Number	Communality	Factor	Eigenvalue	Per cent of Variance
1	.484	1	3.428*	57.1
2	.596			
3	.695			
4	.516			
5	.553			
6	.583			

* Only Eigenvalues > 1.00 are reported.

The solution could not be rotated because only one factor was extracted.

APPENDIX C

Table C-1. Sample and gender means for age of youngest and number of children

Variable	Sample Mean (S.D.)	Female Mean (S.D.)	Male Mean (S.D.)	T score
Age of Youngest	8.99 (6.7)	8.0 (6.5)	10.8 (6.8)	1.70
Number of Children	1.65 (.79)	1.4 (.54)	2.0 (1.1)	K-S Z* 0.74

* Non-parametric tests were run on this variable because the t-test results indicated a significant difference in the variances of the two groups: Kolmogorov-Smirnov Z-score (not significant)

Table C-2. Distribution of gender groups across age categories

Age of Respondent	25-35	36-45	46-55	56-65 yrs	Total
	Freq(%)	Freq(%)	Freq(%)	Freq(%)	Freq(%)
Males	2(8)	13(52)	9(36)	1(4)	25(100)
Females	11(22)	28(56)	10(20)	1(2)	50(100)

(Chi^2=3.8, D.F.=3, p=.28)

Table C-3. Mean scores and standard deviations on Job Workload Satisfaction Items and Index

Item	Sample Mean (S.D.)	Female Mean (S.D.)	Male Mean (S.D.)	T-score
Total workload	0.52 (0.50)	0.52 (0.07)	0.92 (0.10)	-0.01
Research load	0.52 (0.50)	0.50 (0.51)	0.56 (0.51)	1.01
Committee load	0.47 (0.50)	0.50 (0.51)	0.40 (0.50)	1.02
Administrative load	0.45 (0.50)	0.47 (0.50)	0.42 (0.50)	1.00
Professional service load	0.51 (0.50)	0.52 (0.51)	0.48 (0.51)	1.02
Community service load	0.45 (0.50)	0.47 (0.51)	0.40 (0.50)	1.02
Undergraduate course load	0.39 (0.49)	0.40 (0.50)	0.38 (0.50)	1.01
Graduate course load	0.43 (0.50)	0.45 (0.50)	0.40 (0.50)	1.01
Graduate advisory load	0.40 (0.49)	0.38 (0.49)	0.46 (0.51)	1.08
Job Workload Satisfaction Index	4.01 (2.5)	4.04 (2.2)	3.96 (3.0)	-0.13

Table C-4. Mean scores on Role Overload Items and Index

Item	Sample Mean (S.D.)	Female Mean (S.D.)	Male Mean (S.D.)	T-score
Have more than can handle	3.65 (0.86)	3.60 (0.86)	3.75 (0.88)	0.76
Wish had more time with family	3.60 (0.74)	3.60 (0.78)	3.60 (0.65)	0.00
Feel physically drained get home	3.35 (0.74)	3.30 (0.73)	3.44 (0.77)	0.77
Feel have to rush to get done	3.65 (0.80)	3.70 (0.74)	3.56 (0.92)	-0.71
Feel do not have time to myself	3.84 (0.93)	3.88 (0.85)	3.76 (1.09)	-0.52
Feel emotionally drained get home	3.19 (0.63)	3.24 (0.59)	3.08 (0.70)	-1.04
Role Overload Index	21.28 (3.5)	21.32 (3.5)	21.20 (3.6)	-0.14

Table C-5. Domestic Workload Satisfaction Index regressed on personal, family, and domestic workload variables

Dependent Variable: Domestic Workload Satisfaction Index

Independent Variables	Regression Coefficient (T score)	Standardized Beta Coefficient	Per cent Explained Variance
Constant	4.58 (4.00)		
Job Workload Index	-.045 (-1.529)	-.18	3.39
Number of Children	.285 (1.209)	.144	2.13
Domestic Workload Index	-.138 (-1.489)	-.201	3.20
Age of Youngest	-0.026 (-.813)	-.109	0.98
Gender of Respondent	-.413 (-.918)	-.124	1.23
Age of Respondent	.458 (1.512)	.209	3.31

F=2.683 (Significant at p=.05)
R^2=.19, Adjusted R^2=.12
** Significant at p=.001

Table C-6. Job Workload Satisfaction Index regressed on personal, family, and workload variables

Dependent Variable	Job Workload Satisfaction Index		
Independent Variables	Regression Coefficient (T score)	Standardized Beta Coefficient	Per cent Explained Variance
Constant	3.88 (2.02)		
Job Workload Index	-.211 (-.432)	-.553	0.28
Number of Children	.033 (.083)	.010	0.01
Domestic Workload Index	-.198 (-1.269)	-.184	3.34
Age of Youngest	-.053 (-.996)	-.144	1.46
Gender of Respondent	.729 (.962)	.139	1.37
Age of Respondent	.817 (1.603)	.239	3.69

F=.851 (Not significant)
R^2=.07, Adjusted R^2=-.01
* Significant at p=.05